



City of Annapolis

## HOUSING AFFORDABILITY TASK FORCE NEEDS ASSESSMENT STUDY REPORT

(Adapted from the Annapolis Five-Year Consolidated Housing and Community Development Plan)

Submitted on November 16, 2020

Prepared by

Annapolis HATF Needs Assessment Subcommittee

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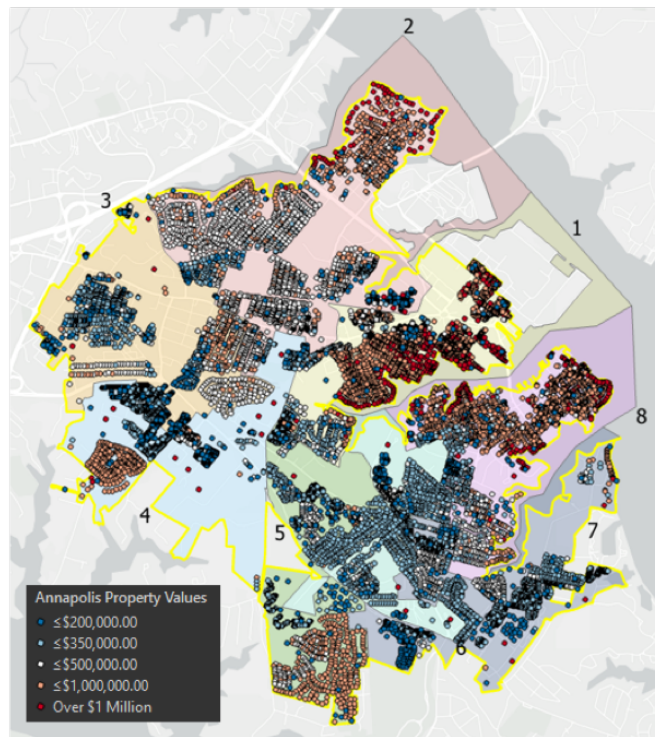
## EXECUTIVE SUMMARY

The Needs Assessment Study Report outlines the housing affordability needs for the City of Annapolis. This analysis takes into account factors such as housing affordability, cost of living, rental prices and more. The findings indicate that the City of Annapolis is outpacing most comparable cities, whether that comparison is based on population, location near coastlines, or proximity to other cities both in and outside of Maryland. Factors putting market pressure on housing and forcing residential unit prices to outpace incomes within the community include:

- limited space for continued development;
- poor urban planning throughout the city's history which did not account for maximum build-out (the city still does not have a max-build-out plan);
- a widening income gap between residents; and
- wealthy investors buying up properties.

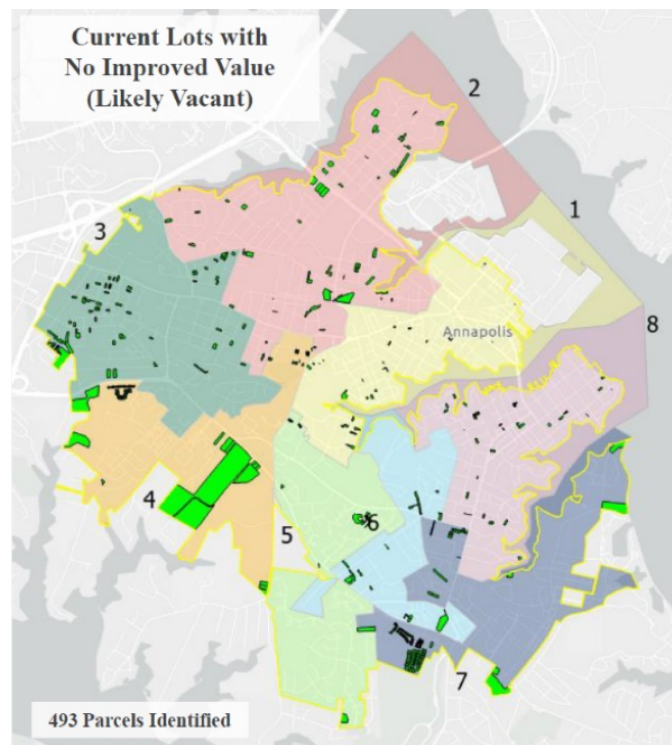
The full assessment report includes an abundance of internal analysis, data research, and materials from the City of Annapolis, as well as external analyses found through publicly available resources such as reports from the U.S. Census Bureau and the National Association of Home Builders. Prior City of Annapolis documents and policies were referenced as well.

It is important to note when reading this report that any criticism levied herein is intended to be constructive in nature and reference the history of the City of Annapolis; criticism is not directed toward any current city staff or administration. In addition, the authors have effectively attempted to communicate ideas that the residents of the city might have historically supported.



When analyzing the history of development within the City of Annapolis, it becomes evident that the city's government as well as its residents prioritized single-family homes (SFHs) over medium- and high-density developments. Over decades, this decision created a highly competitive market around the few remaining areas suitable for development. The perpetual lack of developable space has also resulted in the city having far fewer development options today than it would have had even one or two decades ago. (See image above for Annapolis property values.)

As of this writing, population growth rates for the city vary between 250-275 people per year based on averages from 1970 to the present (post-major annexations). If population growth were to continue at this pace to the year 2050 (without acceleration) and the American Community Survey (ACS) average of 2.38 people per household in Annapolis did not change (although it is decreasing), the city would need to develop more than 112 residential units every year to keep supply and demand roughly equal.



Annapolis is presently averaging a little more than half that figure, with approximately 500 vacant parcels identified by this analysis (see image above) through tax assessor records. Many of those parcels could be split to create even more parcels, particularly in the large green areas indicated in Ward 4. However, the City of Annapolis would need to share its future development projections (which it has not) in order to assess with accuracy how many parcels could be developed.

According to those tax assessor records, the 493 parcels with zero value (or <null> for their improved value) add up to 176.817 acres. Even if all of these available acres go to housing, Annapolis will quickly face skyrocketing land values within the next decade or two if the city does not proactively move toward high-density residential development.



The table below demonstrates two build-rate scenarios related to these parcels. If all available acres are developed with SFHs at current development rates needed to maintain balance between supply and demand, Annapolis will have no available land (unless more parcels are made available through park conversion or other means) after approximately 18 years. If the available acres were instead used for town/rowhomes, Annapolis would have no available land after approximately 60 years.

Home Type	Average Acreage	Acres Available	Residential Units	Years to Zero Parcels (build rate of 65 units per year)	Years to Zero Parcels (build rate of 112 units per year)
Single-Family Detached Home	0.15	176.817	1,179	18	10.525
Town/Rowhome	0.045	176.817	3,929	60	35.083

In summary, the City of Annapolis must continue to develop new residential housing units to prevent skyrocketing housing costs. Paradoxically, this continued development will deplete the limited amount of land available — and as a result, housing costs are still likely to increase. The city must therefore design creative solutions to avert this scenario. Regardless of the solutions chosen, the Annapolis of the future will look significantly different from the Annapolis of the past.

*The Needs Assessment Report poster (used for demonstration purposes) is linked directly below. An image of the poster can also be found on the next page.*



Annapolis HATF  
Needs Assessment Demo Poster



# Annapolis Housing Affordability Assessment: Needs Assessment Report



Analysis by  
Quentin E. Cummings

## Introduction

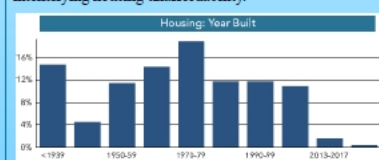
The City of Annapolis – like many cities across the U.S. and the world – is facing a housing affordability crisis. The city is nearly 400-years old, covering only 7.21 square miles of land, with an approx. population of 40,000 people. Undeveloped land is extremely limited, and due to the city being the state capital of Maryland, “Sailing Capital of the U.S.,” home to the U.S. Naval Academy, a top community for wealthy retirees, personal wealth and income disparities greater than most other jurisdictions in Maryland and the United States, the cost of housing is rising faster than many large cities across the country.

## Objectives

- 1) **Determine Housing Affordability:** Assess Annapolis housing affordability broadly and compare/contrast to affordability in other cities.
- 2) **Consolidated Wealth & Poverty:** Examine residential housing stock for patterns of consolidated wealth and poverty.
- 3) **Residential Density Analysis:** Analyze residential density across the city and look for patterns which indicate conscious planning considerations.
- 4) **Mixed-use Projects of Opportunity:** Identify aging commercial areas which could be redeveloped for mixed-use projects (residential/commercial hybrid development).

## Study Area

The area of interest focuses within the city boundaries of Annapolis, MD – where the city has land-use authority. Images depict the city boundary in yellow, with each of eight wards numbered and color-shaded. This city was chosen for study due to the severity of depleted land reserves to develop on, and extreme supply and demand imbalance in the residential unit stock. Due to a shortage in available land to develop upon, residential construction has dropped significantly over the last decade, intensifying housing unaffordability.

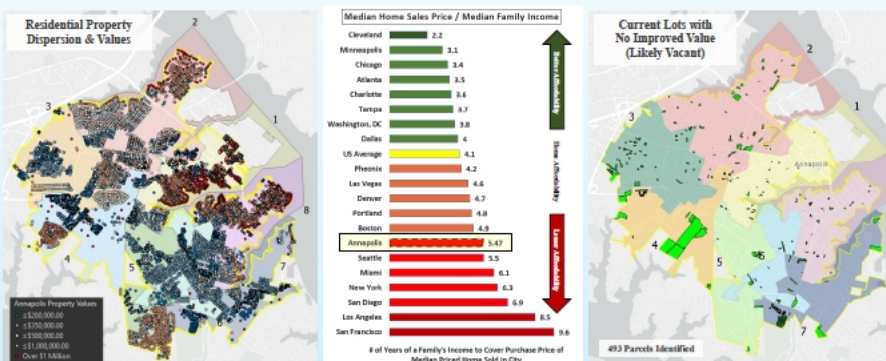


## Data & Methods

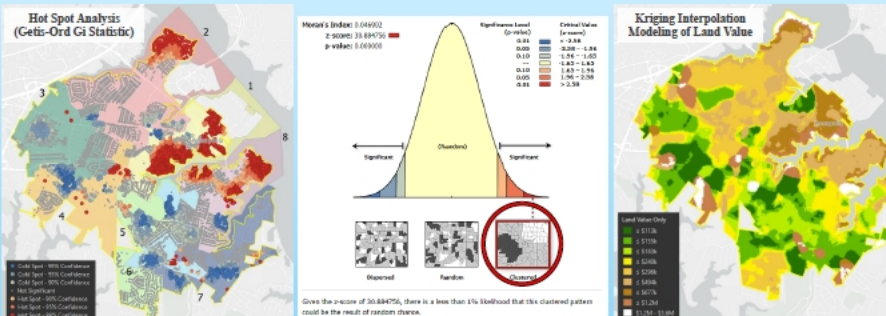
Data was collected from a variety of sources, uploaded within a GIS, and then modeled. The exploratory nature of this project was to identify metrics for housing affordability against other cities, and then locate disparities within Annapolis itself. By modeling hot/cold clusters, interpolating land values, and analyzing residential unit density, others can draw conclusions and recommendations for future housing projects.

Dataset Name	Source	Filetype
Annapolis Key Indicators	Esri Business Analyst	Shapefile
MD Property Data - Parcel Points	data.imap.maryland.gov	Shapefile
Annapolis Zoning Districts	City of Annapolis	Shapefile
Active Rental Licensed Properties	City of Annapolis	CSV
Social Vulnerability Index	Center for Disease Control	Shapefile

## Obj 1. Determine Housing Affordability



## Obj 2. Consolidated Wealth & Poverty



## Results and Discussion

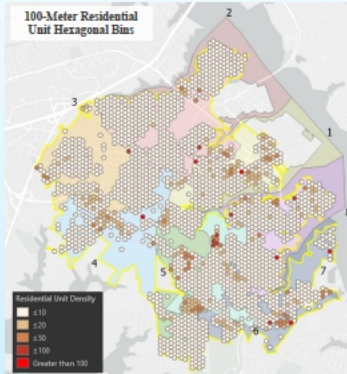
**Obj 1** Annapolis has one of the highest unaffordability metrics across the U.S., at 5.469 (median residential sales divided by median family income). There are several contributing factors, such as: limited supply of undeveloped land; increasing demand/competition from wealthy investors and retirees; and a widening income gap among residents. With the city's population growing approx. 250-275 people per year, projected 2050 city population could be 45-50k. According to American Community Survey (ACS), the Annapolis average household has 2.38 people. For Annapolis to keep up with supply and demand, the city would need more than 112 residential units built per year for the next 30 years. The city is currently averaging a little more than half that.

**Obj 2** Wealth and poverty are highly clustered within the city. A great deal of wealth is in Wards 1 and 8, which represent the areas closest to water access and the historic parts of the city. Wards 5 and 6 consolidate poverty tightly within their areas, with notable clusters in Wards 4 and 7 as well. When modeling for land values, one can see strong correlations tied to proximity to water.

**Obj 3** Density analysis may indicate the city of Annapolis has not managed development in a planned, forward-thinking process throughout its nearly 400-year history. Most development is low-density, with limited areas of clustered high-density development. Lacking however, are many medium-density residential areas. Town/rowhomes are common in the downtown area, as well as other city areas developed over the last 20 years. Annapolis is quickly running out of available land to develop upon. As such, the city should prioritize medium- and high-density residential development in order to maximize remaining land supplies.

**Obj 4** Annapolis has a dated zoning structure for a city quickly running out of developable land. The city could benefit from revising their zoning district boundaries to encourage mixed-use, medium-rise structures. Depicted to the right are three dated, significantly-sized, single-story shopping areas which are overlaid with modern, multi-story transparent structures for conceptualization only. Modernizing these shopping centers for mixed-use could increase local tax revenue and make Annapolis more affordable by boosting the supply of housing available within the city.

## Obj 3. Residential Density Analysis



Annapolis is one of the oldest cities in the U.S. Most development occurred prior to urban planning concepts accounting for future projected growth and population density concerns. Much of the city remains zoned for single family homes.

## Obj 4. Mixed-use Projects of Opportunity



## PROCESS

The Needs Assessment Subcommittee of the Annapolis Housing Affordability Task Force (HATF) conducted surveys and analysis on the affordability of housing within the City of Annapolis. The survey began in September 2020 and will remain open for the duration of the task force's work, with metrics updated in this document periodically. The analysis conducted involved both qualitative and quantitative research methods, utilizing the results of the survey and data collected from various sources, including:

1. City of Annapolis
2. Annapolis Five-Year Consolidated Housing and Community Development Plan
3. Anne Arundel County
4. State of Maryland
5. United States Census Bureau
6. Environmental Systems Research Institute (Esri)

Readers of this document can find a copy of the survey and results in Appendix B.

Beyond the public survey, data was modeled geospatially using Geographic Information Systems in order to identify where properties were located, how much each was worth, their ages, conditions, etc. This allowed the Needs Assessment Committee to gain insights to how Annapolis was developed over the last 200+ years, and project how it might continue to be developed in the near future. Most projects, whether regarding population or development, were made using data from 1970 to present and projected out to 2050.

Detailed information can be found in the appendices, particularly Appendix D.

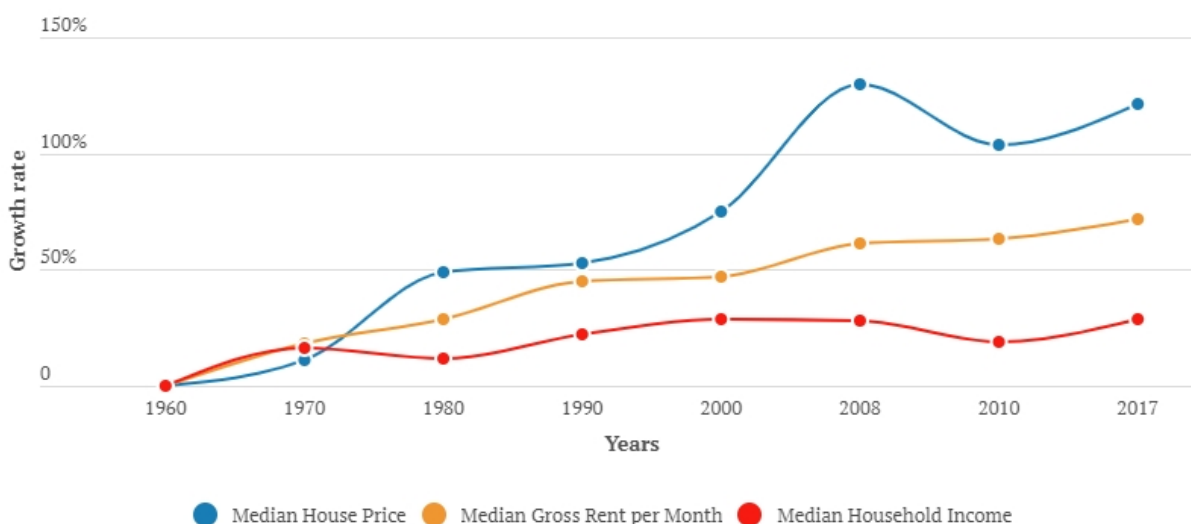
## FINDINGS

The study of housing affordability in the City of Annapolis has resulted in a number of findings, but the most important discovery is that the cost of living in Annapolis has grown considerably over the last few decades and has outpaced the income of most of the city's residents. This does not differ greatly from the norm in cities across the United States — but in terms of living costs, Annapolis finds itself closer in comparison to major metropolitan cities rather than comparable cities in population or even coastal location.

Personal wealth and income disparities within the City of Annapolis are greater than in most other jurisdictions throughout Maryland and the United States. While there are numerous reasons why this is the case, the negative impact these disparities add to housing affordability cannot be overstated.

When comparing the growth rate of median home prices, median household incomes, and median rent costs nationwide, it becomes apparent that, while this is a nationwide problem, Annapolis needs a local solution.

### Growth Rate of Median Home Prices v. Median Household Incomes v. Median Rents Nationwide



Note: All of the values are indexed to 1960. Chart only includes data for depicted years.

Source: 1960-2000 Decennial Censuses and 2008, 2010 and 2017 American Community Surveys

## KEY FINDINGS

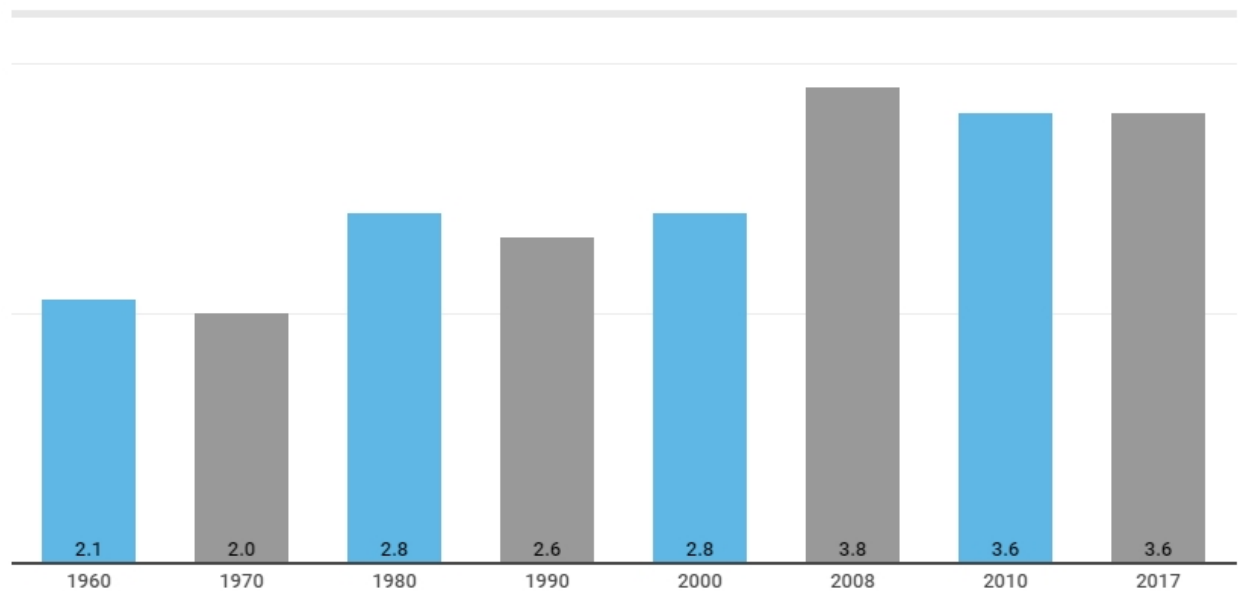
1. Median home prices have increased at four times the rate of household incomes since 1960, leading to imbalanced price-to-income ratios in most major metropolitan areas.



2. Nationwide rents have increased at twice the rate of household incomes since 1960, making saving for a down payment increasingly difficult.
3. A healthy price-to-income ratio is 2.6 (i.e., it would take 2.6 years of median household income to purchase the median home), but the nationwide price-to-income ratio hasn't been healthy since the late 1990s.
4. Only 16 out of the 100 most populated cities in the United States were below a 2.6 price-to-income ratio in 2019.
5. Annapolis must develop more than 112 new residential housing units (RHUs) per year in order to keep up with population growth and supply/demand. However, Annapolis is developing an average of approximately 65 new residential housing units per year. This increases property values and makes renting or purchasing a home more difficult.
6. Annapolis has approximately 177 acres of land with no improved value, according to tax assessor records. If SFHs are built on this land at current development rates (65 RHUs per year), Annapolis will deplete its available land in approximately 18 years. If town/rowhomes are built instead, Annapolis will deplete its available land in approximately 60 years. However, at the rate of 65 RHUs per year, property values will still appreciate much faster than local incomes and make housing more unaffordable.

Rising rent costs and increasing home prices make it harder than ever to save for a down payment and afford monthly mortgage payments. Price-to-income ratio is the median home price divided by the median household income in an area. This is a gauge of how long it will take future home buyers to save for a down payment and whether or not they will be able to afford their monthly mortgage payments. Since the 1960s, however, the difference between home prices and income has nearly doubled. By 2017, the nationwide price-to-income ratio was 3.6, meaning more than 3.5 years of household income was necessary to purchase a home.

**Nationwide price-to-income ratio over years**

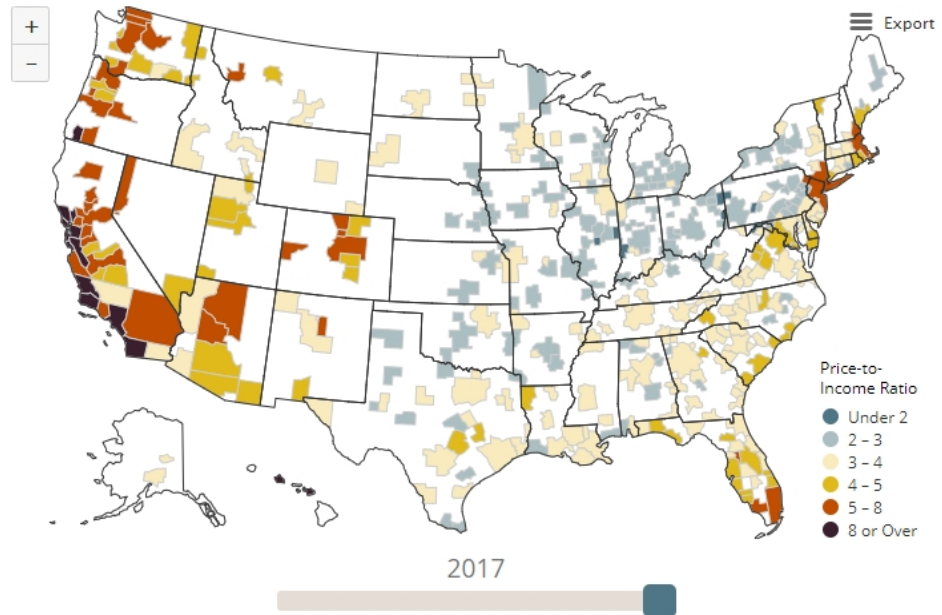


Source: 1960-2000 Decennial Censuses and 2008, 2010 and 2017 American Community Surveys



This point in time is approximately when the Needs Assessment Subcommittee tried to get price-to-income data for the City of Annapolis. Unfortunately, the time series data has proven elusive and the subcommittee was unable to obtain the data at the time of this writing. However, we can compare *current* price-to-income data against this ratio. The map below shows nationwide price-to-income ratios in 2017. We will compare this data with current data from the City of Annapolis.

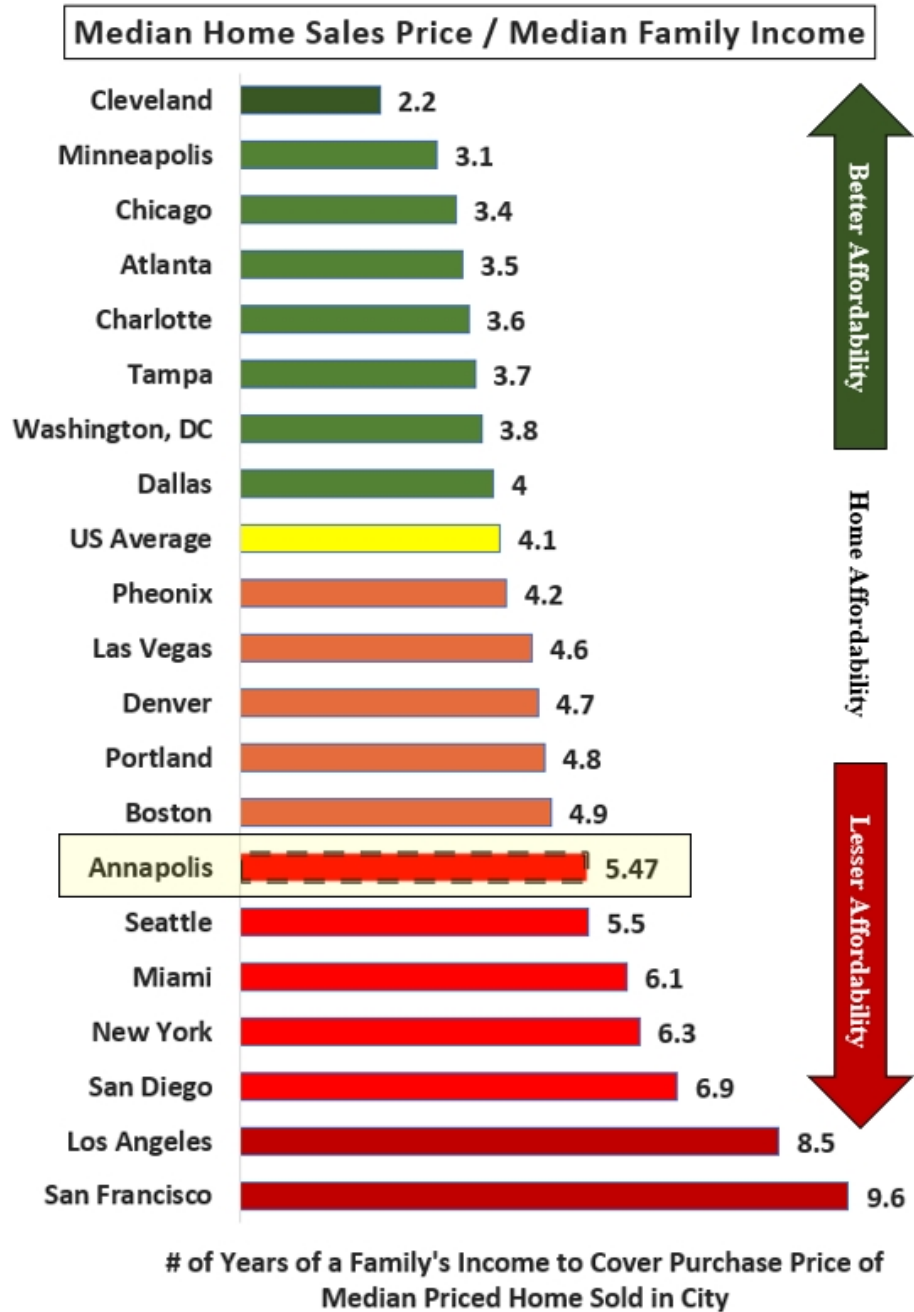
## HOME PRICE-TO-INCOME RATIOS



Note: Home prices are the median sale price of existing homes and incomes are the median household income within markets.

Source: JCHS tabulations of National Association of Realtors, Metropolitan Median Area Prices, and Moody's Analytics Forecasts.

Source: <https://www.jchs.harvard.edu/home-price-income-ratios> (Joint Center for Housing Studies of Harvard University)



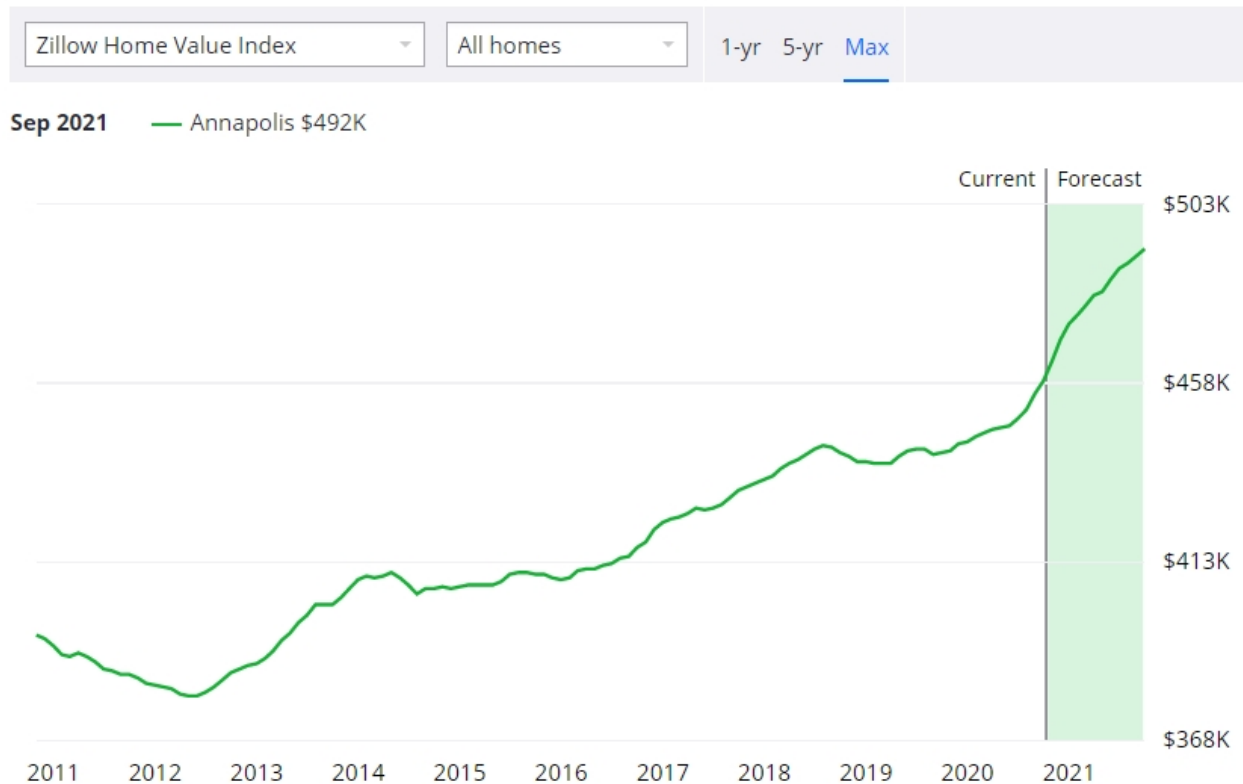
Source: HOI National Association of Home Builders – Q2 2020

The above bar chart shows that the City of Annapolis price-to-income ratio is currently 5.47.

According to the United States Census Bureau's American Community Survey, the median household income in the City of Annapolis is \$83,948. According to Zillow reporting, the typical home cost in Annapolis is \$459,118. This reflects a 4.1% increase over the last year, and this number is expected to increase by 7.2% next year. The median home cost in the State of Maryland is \$294,100.

The typical home cost (\$459,118) divided by the median household income (\$83,948) equals 5.469. This price-to-income ratio shows that, when it comes to purchasing a home, Annapolis is one of the most expensive cities in the United States.

Arguably, few Annapolitans would place their city in the same category as the cities found in the bar chart above in terms of size and other factors — but, according to price-to-earnings ratios, Annapolis is more expensive than Washington, D.C. and Boston, MA, and barely less expensive than Seattle, WA and New York City, NY.



When analyzing the Consumer Price Index (CPI) and salary differentials of more than 300 U.S. cities, it becomes evident that the cost of living in Annapolis is 29.6% higher than the national average. The largest cost increases were found in transportation, food and housing. Each cost increase makes purchasing a home that much harder for renters.

Additional research was conducted to assess how various websites ranked the City of Annapolis based on factors such as cost of living and quality of life. Screenshots from several of these websites can be found below.

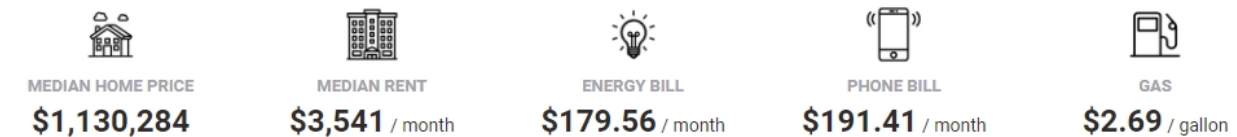
## Annapolis, MD Cost Of Living



Source: <https://www.areavibes.com/annapolis-md/cost-of-living/>, a website that includes data from the Council for Community and Economic Research

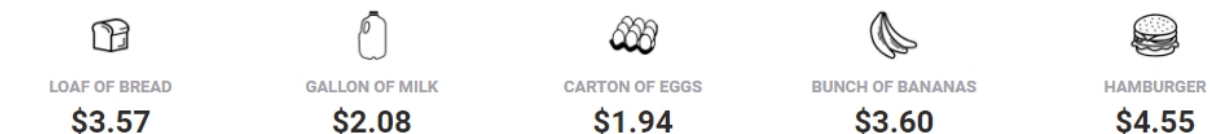
### Housing, Utilities & Transportation

Annapolis's housing expenses are 226% higher than the national average and the utility prices are 7% higher than the national average. Transportation expenses like bus fares and gas prices are 3% higher than the national average.



### Food & Grocery

Annapolis has grocery prices that are 7% higher than the national average.



Source: <https://www.payscale.com/cost-of-living-calculator/Maryland-Annapolis>

## CITY OF ANNAPOLIS POLICIES AND DATA

According to the City of Annapolis, the city's Annual Action Plan (AAP) is consistent with the goals and objectives established in the Five-Year Consolidated Housing and Community Development Plan, which embraces the following key priority goals and objectives:

1. Continue to provide financial assistance to low- and moderate-income homeowners to rehabilitate their existing owner-occupied housing.
2. Assist providers in the operation of housing and support services for the homeless and persons at risk of becoming homeless.
3. Increase the supply of affordable, decent, safe, sound and accessible housing for the elderly, persons with disabilities, and persons with other special needs through the rehabilitation of existing buildings and new construction.
4. Support the improvement or construction of public facilities serving low- and moderate-income neighborhoods.
5. Support vital public services that assist children and youth, provide people with office skills training and job training as well as employment information and referrals, and promote family stability and self-sufficiency.

Every five years, the City of Annapolis prepares a Consolidated Housing and Community Development Plan to implement federal programs that fund housing and community development activities, including the city's Community Development Block Grant (CDBG) allotment. The Consolidated Plan focuses on housing needs for low income households, the homeless, and other special needs populations as well as non-housing community development activities.

As noted in these plans, the local housing market is dominated by the fact that little land is available for new development and the price of housing therefore continues to rise. New housing construction is increasingly limited to annexation areas, demolition and redevelopment, and conversion of previously non-residential sites and structures.

Lack of available housing or land makes it increasingly difficult to provide new housing affordable to moderate- or low-income households. This is forcing many households to live an extended distance from work.

It should be noted that the main goals of the Five-Year Consolidated Plan are to improve the living conditions of all Annapolis residents, create a suitable and sustainable living environment, and address the housing and community development needs of the city's residents. The Annapolis Housing Affordability Task Force (HATF) falls within this purview and attempts to do the same.

## ADDITIONAL INFORMATION

The Needs Assessment Subcommittee has gathered information relevant to this report from the latest Consolidated Housing and Community Development Plan. Rather than include substantial amounts of that information in this report, we ask that other subcommittees and the HATF refer to pages 28 through 63 of the following document: <https://www.annapolis.gov/DocumentCenter/View/10964/City-of-Annapolis-Consolidated-Plan-and-Annual-Action-Plan-Final-2021-2025-PDF>.



That said, we would like to draw particular attention to the following excerpts from that document:

- According to the 2011-2015 ACS, 47% of renter households in the city had monthly housing costs that exceeded 30% of their household income, and 29.8% of owner households with a mortgage in the city had monthly housing costs that exceeded 30% of their household income.
- In the City of Annapolis, the demand for affordable housing units exceeds the current supply of affordable housing units for very low-income and extremely low-income residents. Based on 2011-2015 ACS data, in 2015 it was estimated there were 1,704 households with an annual income of less than \$20,000 (less than 22% of the median household income) living in the city. Only 221 (13%) of these households are in a housing unit affordable to them (based on paying less than 30% of household income), leaving 1,483 households (87%) in need of affordable housing units.
- Based on 2011-2015 ACS data, in 2015 it was estimated that there were 1,641 households with an annual income of \$20,000 to \$34,999 (22% to 39% of the median household income) living in the city. Only 347 (21.2%) of these households are living in a housing unit affordable to them (based on paying less than 30% of household income), leaving 1,294 households (78.8%) in need of affordable housing units.
- Based on 2011-2015 ACS data, in 2015 it was estimated that there were 1,641 households with an annual income of \$35,000 to \$49,999 (39% to 55.8% of the median household income) living in the city. Only 584 (35.6%) of these households are living in a housing unit affordable to them (based on paying less than 30% of household income), leaving 1,057 households (64.4%) in need of affordable housing units.
- Based on 2011-2015 ACS data, in 2015 it was estimated that there were 2,840 households with an annual income of \$50,000 to \$74,999 (55.8% to 83.7% of the median household income) living in the city. Only 1,420 (50%) of these households are living in a housing unit affordable to those households (based on paying less than 30% of household income), leaving 1,435 households (50.6%) in need of affordable housing units.
- Based on 2011-2015 ACS data, in 2015 it was estimated that there were 7,937 households with an annual income of more than \$75,000 (more than 83.7% of the median household income) living in the city. Only 6,911 (90.5%) of these households are living in a housing unit affordable to them (based on paying less than 30% of household income), leaving 726 households (9.5%) in need of affordable housing units.

## BUILDING PERMITS AND RENTAL PROPERTIES

Below is a pivot table representing the active licensed rental properties within the City of Annapolis. This data is relevant to understanding the supply side of the costs of housing within the city. More work will be needed to fully understand the demand. Next steps here include working with the City of Annapolis.

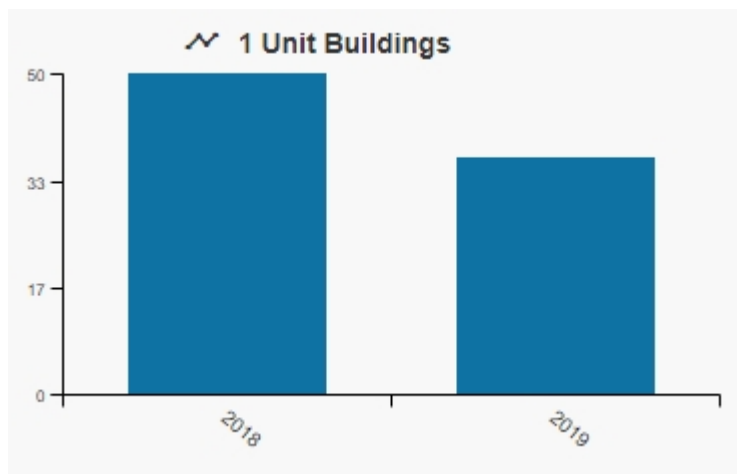
Unfortunately, the Needs Assessment Subcommittee was unable to get temporal data regarding rental properties (over time). In relation to the population of the City of Annapolis, is the availability of rental properties going up or down? City of Annapolis staff were not able to provide this data.

<u>Status of Active Rentals</u>	<u># of Addresses</u>	<u># of Rental Units</u>
ACTIVE	1952	4508
CITATION ISSUED	10	10
DENIED	11	11
HOLD	3	3
PENDING INSPECTION	441	2352
PENDING LEAD REQ	6	8
PENDING ZONING	14	20
REVOKED	1	1
SUSPENDED	4	4
TO BE SCHEDULED	176	1234
UNDER REVIEW	141	256
<b>Grand Total</b>	<b>2759</b>	<b>8407</b>

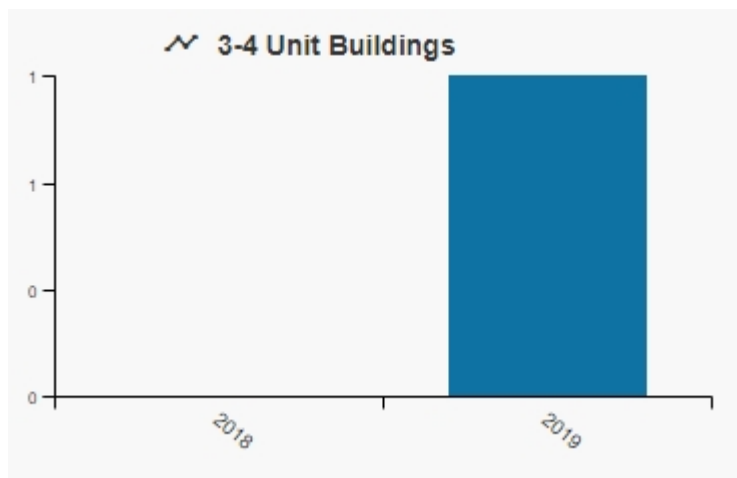
With the understanding that there are both supply and demand issues affecting housing affordability, the Needs Assessment Subcommittee also reviewed permits issued over the last couple of years, as reported by the Building Permits Survey.

*Disclaimer: It should be noted that new residential building permits issued do not equate to additional housing options. If a single-family home is demolished to build a new single-family home, no additional residential units are added to the City of Annapolis. The city does not appear to track residential units at the granular level, which would be most beneficial to this study. However, given this limitation, we used building permits as a proxy.*

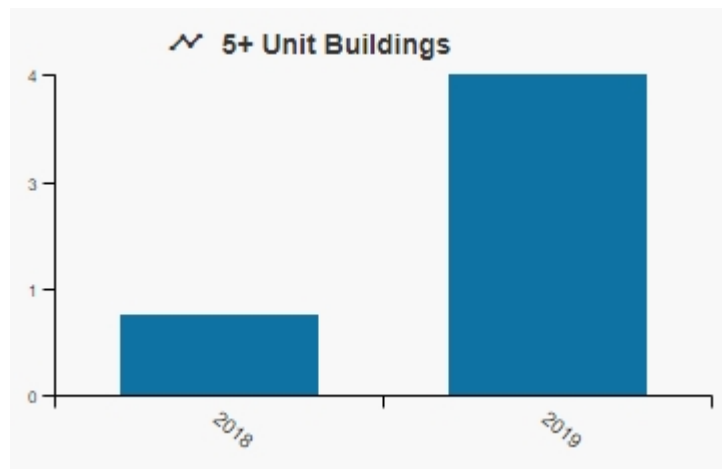
1 Unit Building	37
1 Unit Building Units	37
1 Unit Building Value (in thousands)	\$8,547,860



3-4 Unit Building	1
3-4 Unit Building Units	3
3-4 Unit Building Value (in thousands)	\$2,600,000



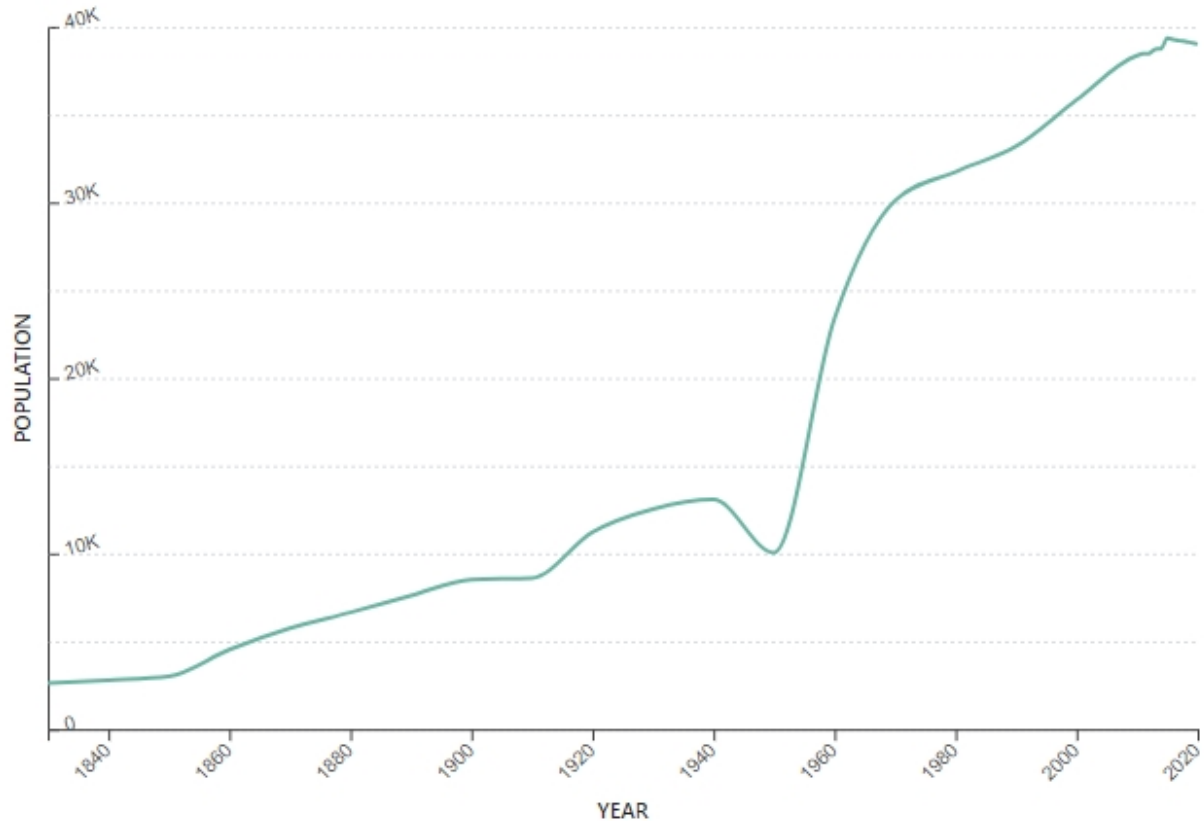
5+ Unit Building	4
5+ Unit Building Units	201
5+ Unit Building Value (in thousands)	\$50,705,919



## POPULATION GROWTH ESTIMATES

### Annapolis, Maryland Population 2020

39,014



*\*Note: The significant population growth from the 1940s to the 1970s can largely be attributed to the City of Annapolis annexing significant portions of land from Anne Arundel County. Thus, all future population growth projections start at 1970 so as to not include population growth due to annexation.*

Year	Population	Growth	Annual Growth Rate
2020	39,014	-80	-0.20%
2019	39,094	-80	-0.20%
2018	39,174	-32	-0.08%
2017	39,206	-80	-0.20%



<b>Year</b>	<b>Population</b>	<b>Growth</b>	<b>Annual Growth Rate</b>
2016	39,286	-66	-0.17%
2015	39,352	595	1.54%
2014	38,757	37	0.10%
2013	38,720	235	0.61%
2012	38,485	23	0.06%
2011	38,462	101	0.26%
2010	38,361	2,523	0.68%
2000	35,838	2,651	0.77%
1990	33,187	1,447	0.45%
1980	31,740	1,645	0.53%
1970	30,095	6,710	2.55%
1960	23,385	13,338	8.82%
1950	10,047	-3,022	-2.60%
1940	13,069	538	0.42%
1930	12,531	1,317	1.12%
1920	11,214	2,605	2.68%
1910	8,609	84	0.10%
1900	8,525	921	1.15%
1890	7,604	962	1.36%
1880	6,642	898	1.46%
1870	5,744	1,215	2.41%
1860	4,529	1,518	4.17%
1850	3,011	219	0.76%
1840	2,792	169	0.63%
1830	2,623		0.00%

Annapolis has experienced several periods of growth and decline over its long history. Since the 1970s, Annapolis has generally grown in population at a rate of approximately 250-275 people per year. Current population estimate for the City of Annapolis is approximately 39,223. At this rate, Annapolis could expect a population in 2050 between 45,000 and 50,000 people.

The average household size in Annapolis is 2.38 people per household, according to the U.S. Census Bureau's American Community Survey (ACS)\*. If this study is to assume a growth of approximately 8,000 people in the city by the year 2050, then approximately 3,361 residential units will be needed by that year. This means that more than 112 residential units must be built per year to meet supply and demand, assuming population growth stays consistent. However, factors such as the growth of the D.C.-Baltimore metropolitan area and the addition of tens of thousands of local jobs offered by companies like Amazon will likely exacerbate the housing affordability crisis in Annapolis. If the city wishes to get ahead of these factors, more residential units must be built at a faster rate.

While a number of factors influence the cost of housing in the City of Annapolis — household wealth, income rates, interest rates, supply and demand, etc. — the availability of rental properties and land are without a doubt two of the most influential factors. Annapolis has a limited supply of land on which it can build new structures. With a growing population and an expensive housing market, this would indicate the need to prioritize more efficient land use.

Land use policies within the city could encourage increased housing density, such as townhouses in lieu of single-family homes (SFHs), or apartments and condominiums instead of townhouses and SFHs.

*\*There are disparities among various demographic groups in the average number of people per household within the City of Annapolis. The 2.38 per household metric referenced herein could under-report underserved communities. While data indicates smaller numbers of people per household within wealthy and predominantly white communities, larger numbers of people per household can be seen in poorer and predominantly non-white communities. It is important to understand this average comes from reported numbers, which means that if there are households that have not been accounted for, additional residential unit construction would need to occur to balance supply and demand for future growth.*

Data from U.S. Census Bureau Historical Households Tables: <https://www.census.gov/data/tables/time-series/demo/families/households.html>

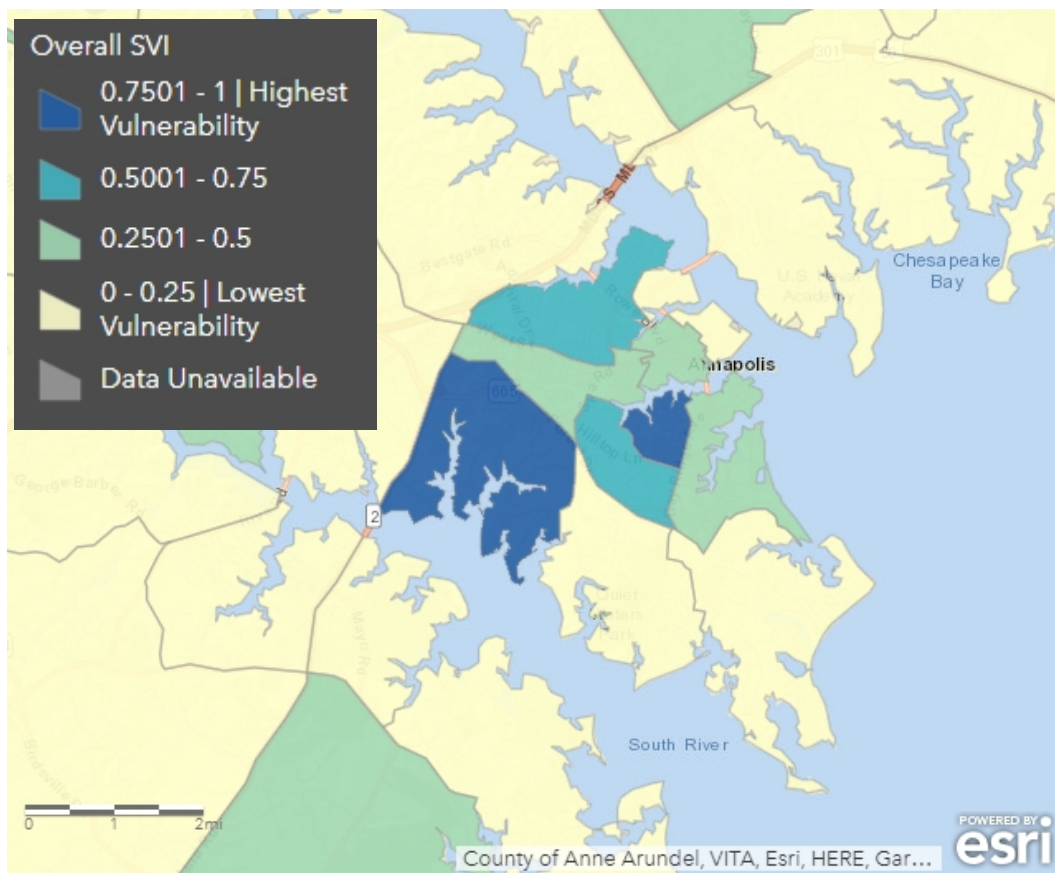
Direct link: <https://www2.census.gov/programs-surveys/demo/tables/families/time-series/households/hh4.xls>

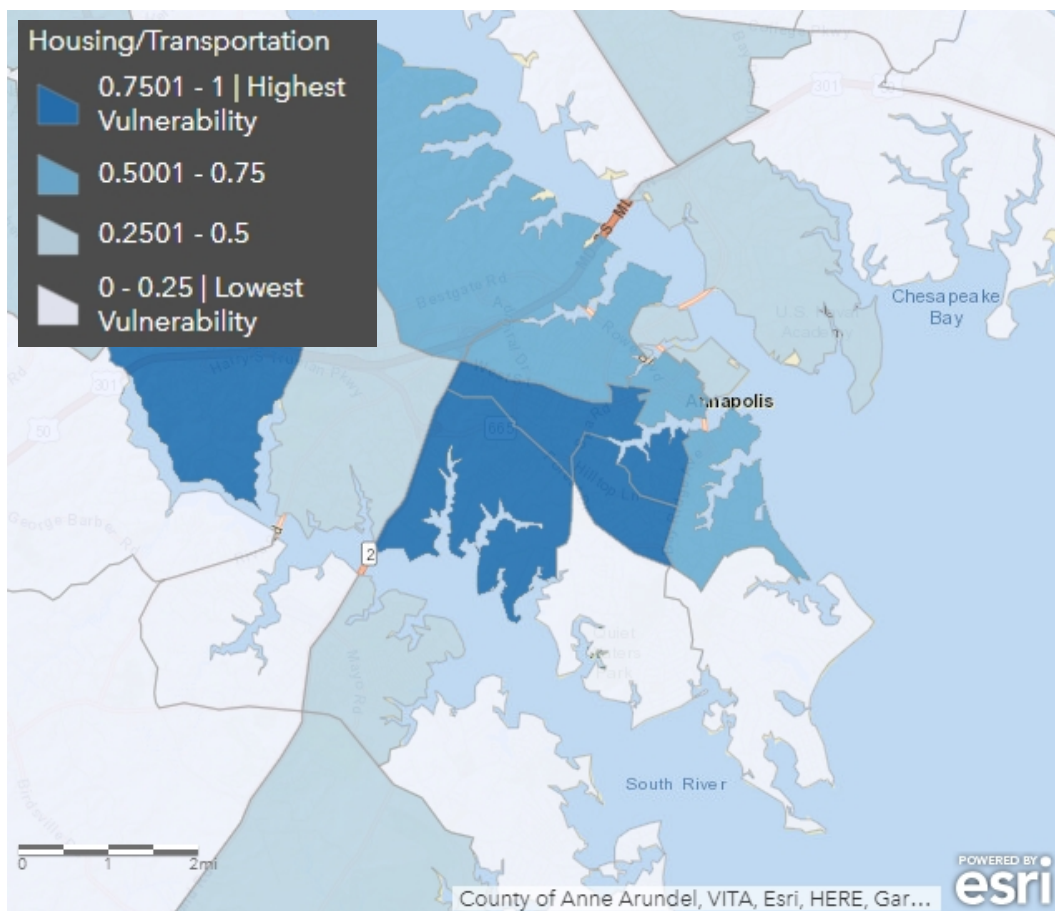
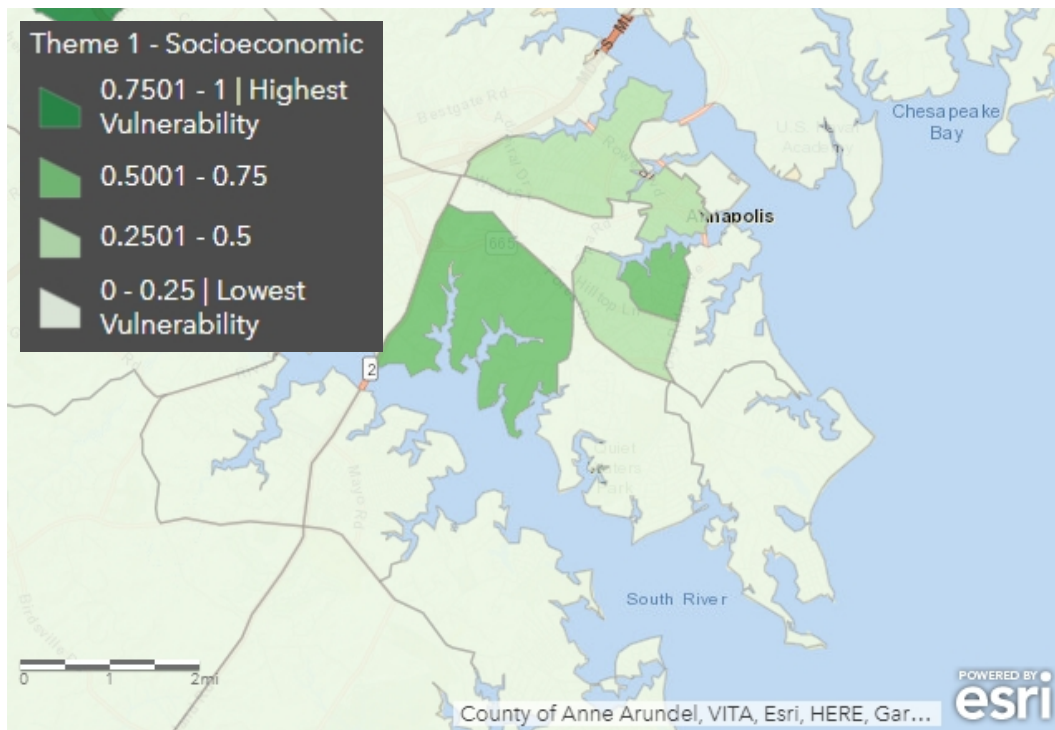
## ANNAPOLIS INCOME, SOCIAL VULNERABILITY INDEX METRICS, AND POVERTY

In its broadest sense, social vulnerability is one dimension of vulnerability to multiple stressors and shocks, including abuse, social exclusion and natural hazards. Social vulnerability refers to the inability of people, organizations and societies to withstand adverse impacts from multiple stressors to which they are exposed. These impacts are due in part to characteristics inherent in social interactions, institutions, and systems of cultural values. A number of factors including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss.

U.S. Census data is used to determine the social vulnerability of every census tract. Census tracts are subdivisions of counties for which the U.S. Census collects statistical data. The Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI) ranks each tract on 15 social factors including poverty, lack of vehicle access, and crowded housing and groups them into related themes.

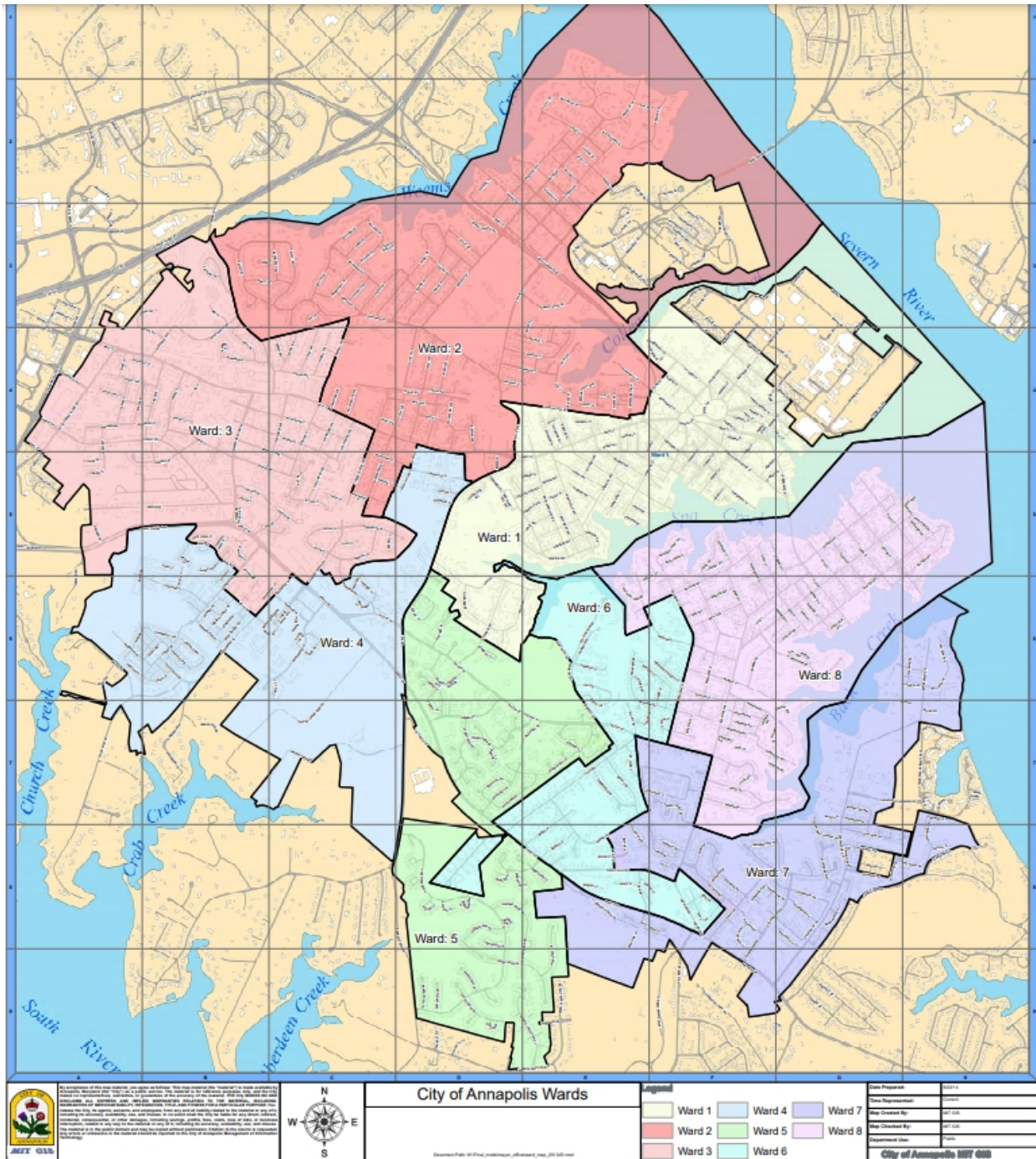
As can be seen in the three SVI maps below, Wards 5 and 6 appear to be the most socially vulnerable regardless of metric, particularly when comparing against the Annapolis Ward Map on page 24. Ward 6 showing the highest levels of social vulnerability across all areas of Annapolis.







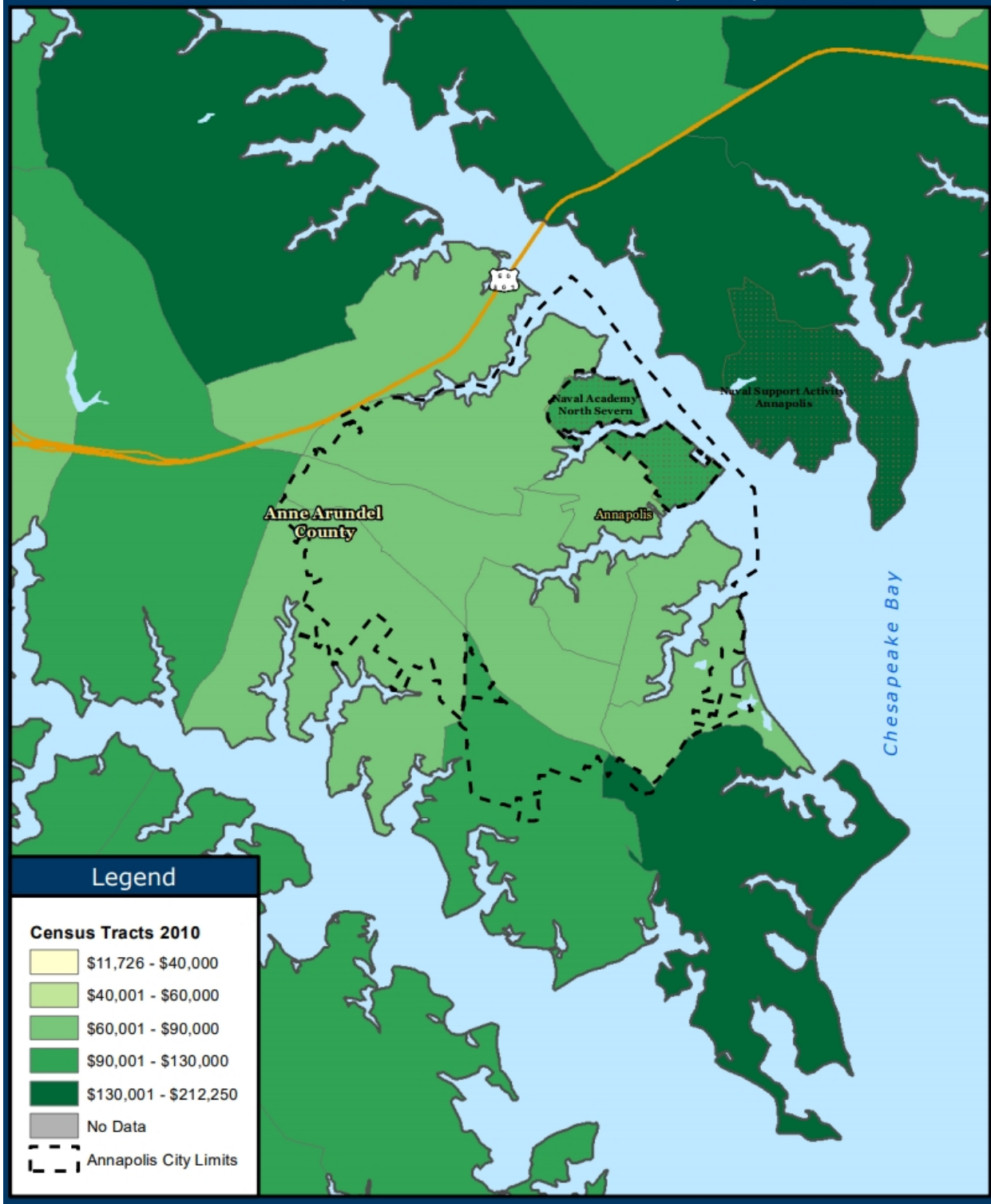
# Annapolis Ward Map



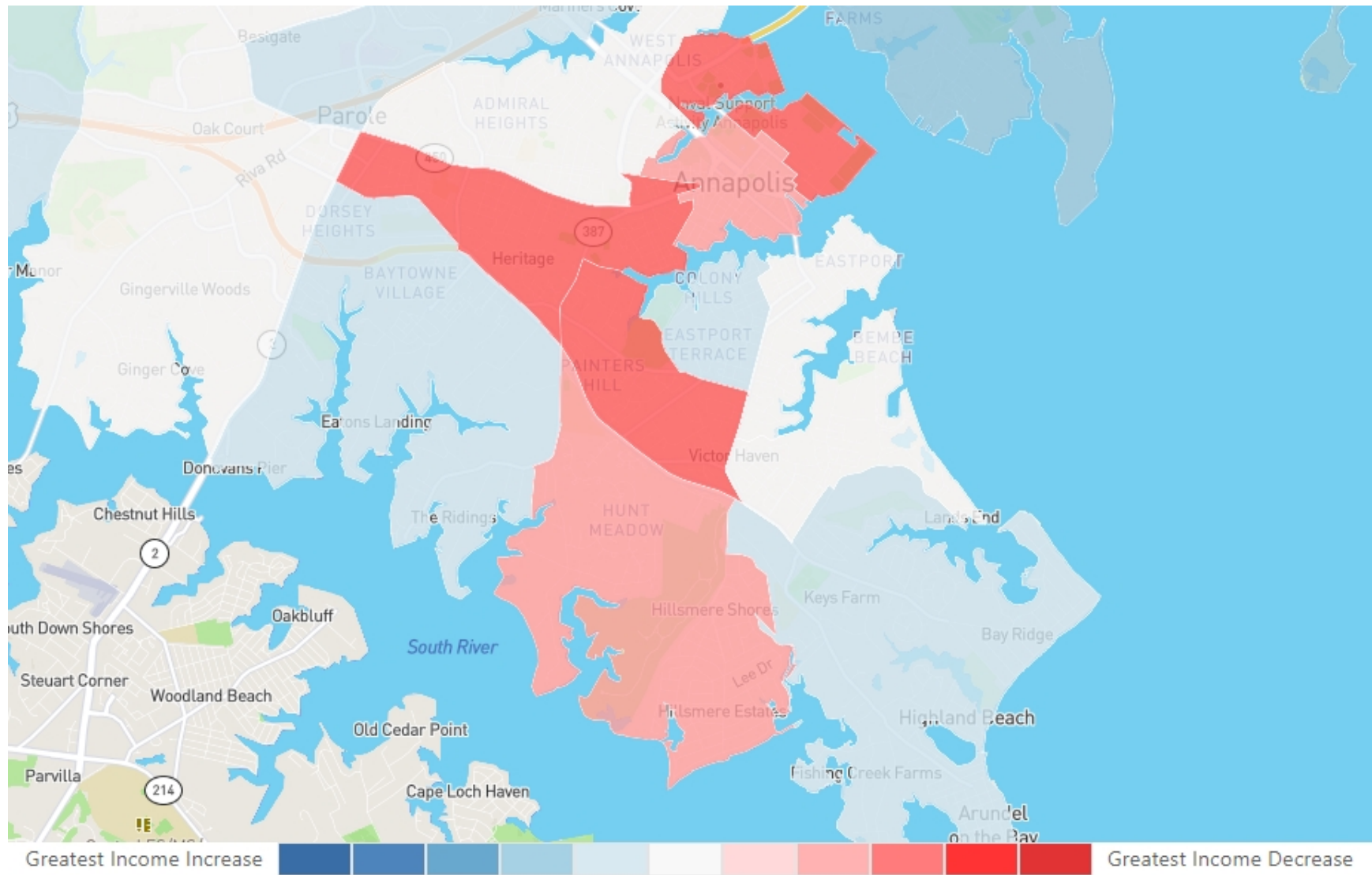


## Median Household Income, Annapolis

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates



### Income fluctuation over the last five years

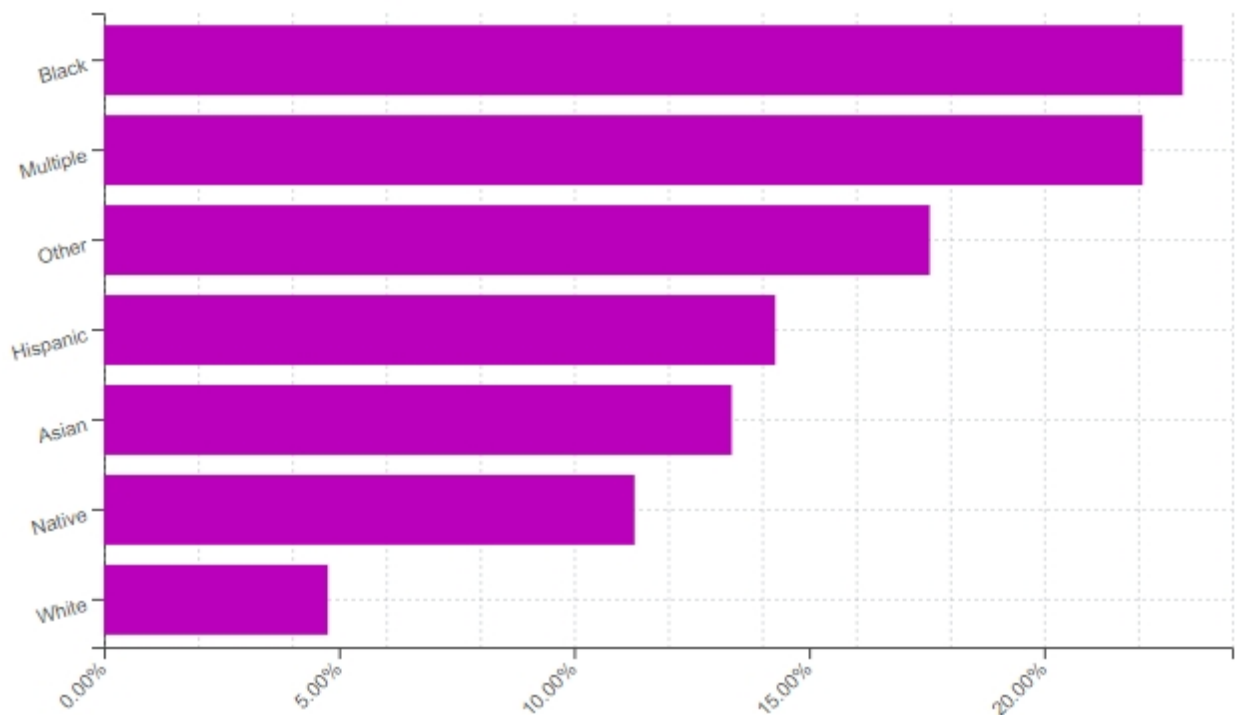


## POVERTY IN ANNAPOLIS

The overall poverty rate in Annapolis is 11.18%. The male poverty rate is 9.74%, and the female poverty rate is 12.53%. The race most likely to be in poverty in Annapolis is Black, with 22.95% of that population below the poverty level. The race least likely to be in poverty in Annapolis is White, with 4.76% of that population below the poverty level. The poverty rate among those that worked full-time for the past 12 months was 2.71%. Among those working part-time, it was 16.02%, and for those that did not work, the poverty rate was 18.72%.

It is important to note that this data is reliant upon accurate collection. Some populations may have been hesitant to accurately report their data, or they may not have reported at all.

Annapolis Poverty Rates by Race



<b>Name</b>	<b>Total</b>	<b>In Poverty ▼</b>	<b>Poverty Rate</b>
Black	8,505	1,952	22.95%
Hispanic	8,122	1,160	14.28%
White	20,588	981	4.76%
Other	4,400	773	17.57%
Multiple	810	179	22.10%
Asian	846	113	13.36%
Native	62	7	11.29%

#### Annapolis Poverty Rates by Education

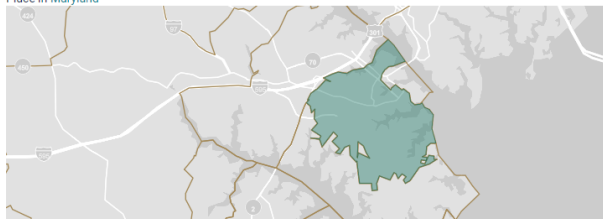
No High School Diploma	22.12%
High School Diploma	11.79%
Some College	8.94%
Bachelor's Degree or Graduate School	2.03%

## APPENDIX A: DEMOGRAPHICS

<https://www.census.gov/quickfacts/annapoliscitymaryland>

### Annapolis city, Maryland

Place in Maryland



Annapolis city, Maryland is a city, town, place equivalent (CDP), or township located in Maryland. Annapolis city, Maryland has a total area of 7.2 square miles.



POPULATION  
39,147



MEDIAN HOUSEHOLD INCOME  
\$83,948



POVERTY RATE  
11.2%



BACHELOR'S DEGREE OR HIGHER  
47.1%

*Median household income is higher in the City of Annapolis than the average for the State of Maryland or the United States. However, large discrepancies in wealth exist throughout the city. The average stated is likely not a reflection of the financial hardship of many within the City of Annapolis. Please review the breakdown by ward found in Appendix E. The Wealth Index shifts drastically between Ward 1 at the highest end of the spectrum and Ward 6 at the lowest end.*

## POPULATION

<b>Population estimates - July 1, 2019 (V2019)</b>	<b>39,223</b>
Population estimates base - April 1, 2010 (V2019)	38,335
Population, percent change - April 1, 2010 (estimates base) to July 1, 2019 (V2019)	2.3%
Population, Census - April 1, 2010	38,394
<b>Age and Sex</b>	
Persons under 5 years, percent	7.1%
Persons under 18 years, percent	20.9%
Persons 65 years and over, percent	15.1%
Female persons, percent	51.6%
<b>Race and Hispanic Origin</b>	
White alone, percent	62.2%
Black or African American alone, percent(a)	22.0%
American Indian and Alaska Native alone, percent(a)	0.2%
Asian alone, percent(a)	2.2%
Native Hawaiian and Other Pacific Islander alone, percent(a)	0.0%

Two or More Races, percent	2.1%
Hispanic or Latino, percent <b>(b)</b>	20.9%
White alone, not Hispanic or Latino, percent	53.6%
<b>Population Characteristics</b>	
Veterans, 2014-2018	3,135
Foreign born persons, percent, 2014-2018	15.6%
<b>Housing</b>	
Housing units, July 1, 2019, (V2019)	NULL
Owner-occupied housing unit rate, 2014-2018	51.1%
Median value of owner-occupied housing units, 2014-2018	\$413,300
Median selected monthly owner costs -with a mortgage, 2014-2018	\$2,270
Median selected monthly owner costs -without a mortgage, 2014-2018	\$724
Median gross rent, 2014-2018	\$1,537
Building permits, 2019	NULL
<b>Families &amp; Living Arrangements</b>	
Households, 2014-2018	15,664
Persons per household, 2014-2018	2.46
Living in same house 1 year ago, percent of persons age 1 year+, 2014-2018	80.4%
Language other than English spoken at home, percent of persons age 5 years+, 2014-2018	21.4%
<b>Computer and Internet Use</b>	
Households with a computer, percent, 2014-2018	90.0%
Households with a broadband Internet subscription, percent, 2014-2018	83.3%
<b>Education</b>	
High school graduate or higher, percent of persons age 25 years+, 2014-2018	87.1%
Bachelor's degree or higher, percent of persons age 25 years+, 2014-2018	47.1%
<b>Health</b>	
With a disability, under age 65 years, percent, 2014-2018	8.5%
Persons without health insurance, under age 65 years, percent	12.0%
<b>Economy</b>	
In civilian labor force, total, percent of population age 16 years+, 2014-2018	71.0%
In civilian labor force, female, percent of population age 16 years+, 2014-2018	67.2%
Total accommodation and food services sales, 2012 (\$1,000) <b>(c)</b>	299,527
Total health care and social assistance receipts/revenue, 2012 (\$1,000) <b>(c)</b>	228,280
Total manufacturer shipments, 2012 (\$1,000) <b>(c)</b>	65,525
Total merchant wholesaler sales, 2012 (\$1,000) <b>(c)</b>	423,435
Total retail sales, 2012 (\$1,000) <b>(c)</b>	1,508,120

Total retail sales per capita, 2012(c)

\$39,050

#### Transportation

Mean travel time to work (minutes), workers age 16 years+, 2014-2018

27.2

#### Income & Poverty

Median household income (in 2018 dollars), 2014-2018

\$83,948

Per capita income in past 12 months (in 2018 dollars), 2014-2018

\$44,524

Persons in poverty, percent

11.2%

## AGE, SEX, RACE & LANGUAGE

### Age and Sex

36.7 +/- 1.6

Median age in Annapolis city, Maryland

37.9 +/- 0.1

Median age in the United States

### Population by Age Range in Annapolis city, Maryland

Under 5 years - 7.1% +/- 0.9%



18 years and older - 79.1% +/- 1.5%



65 years and older - 15.1% +/- 1.1%



0 10 20 30 40 50 60 70 80

### Language Spoken at Home

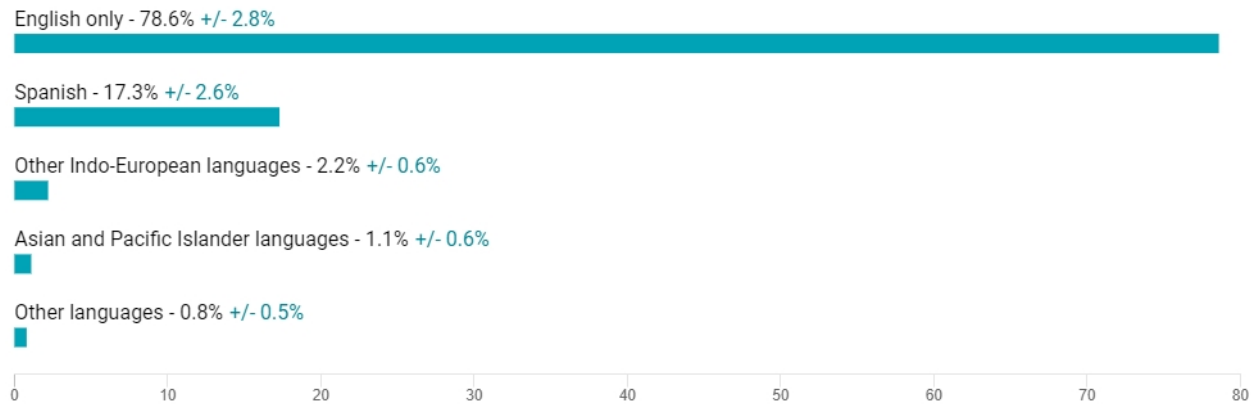
21.4% +/- 2.8%

Language other than English spoken at home in Annapolis city, Maryland

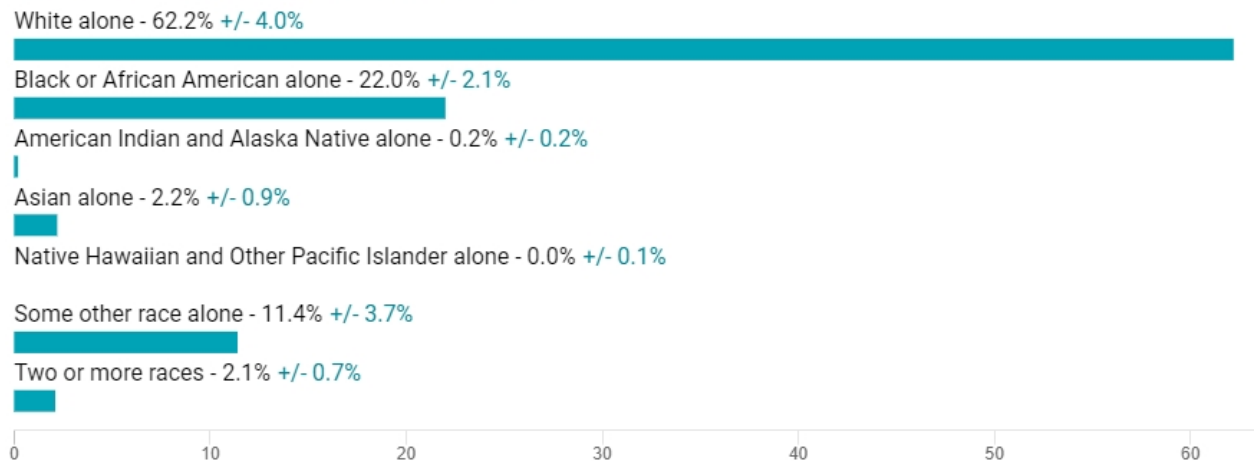
21.5% +/- 0.1%

Language other than English spoken at home in the United States

### Types of Language Spoken at Home in Annapolis city, Maryland



### Population by Race in Annapolis city, Maryland



## EDUCATION

### Educational Attainment

**87.1%** +/- 2.1%

High school graduate or higher in Annapolis city, Maryland

**87.7%** +/- 0.1%

High school graduate or higher in the United States



## Education Attainment in Annapolis city, Maryland

High School or equivalent degree - 18.6% +/- 1.9%



Some college, no degree - 15.3% +/- 1.7%



Associate's degree - 6.0% +/- 1.1%



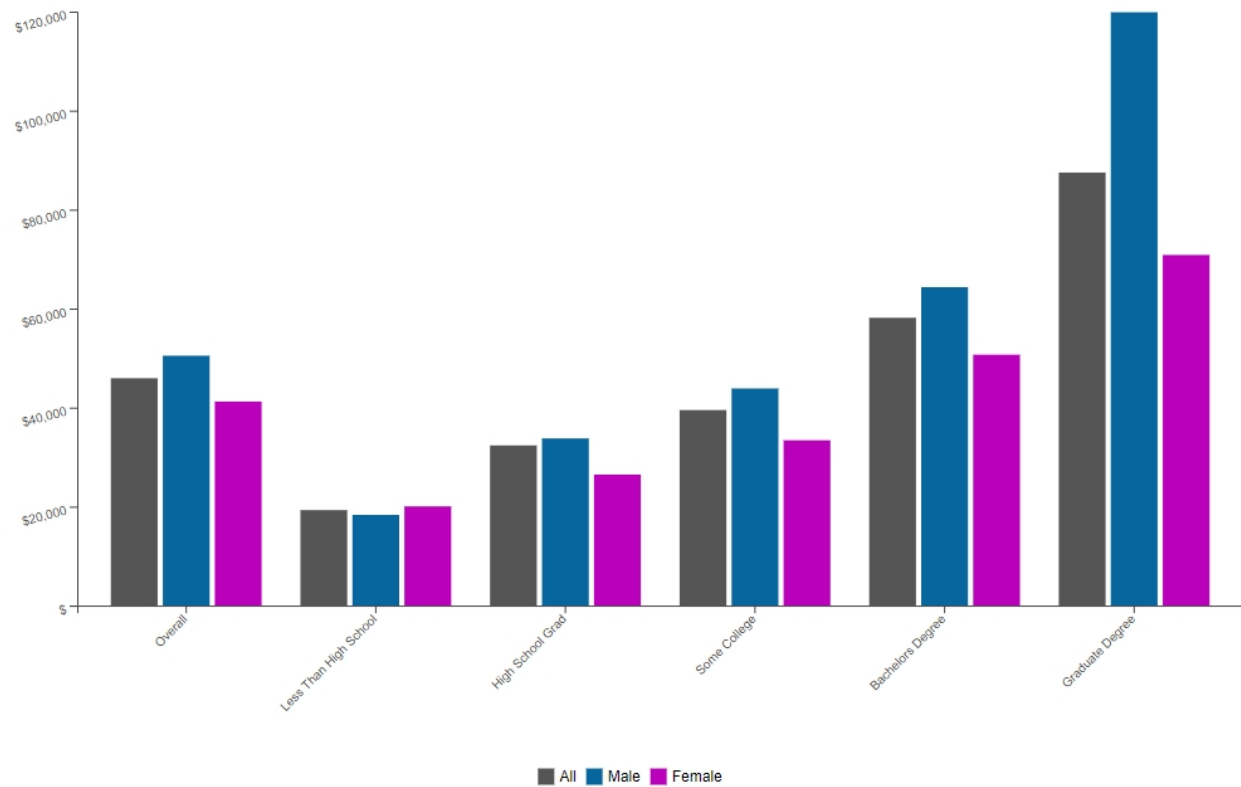
Bachelor's degree - 26.1% +/- 1.9%



Graduate or professional degree - 21.1% +/- 1.5%



## Annapolis Earnings by Education



## TRANSPORTATION

### Commuting

**27.2** +/- 1.4

Average commute to work (in minutes) in Annapolis city, Maryland

**26.6** +/- 0.1

Average commute to work (in minutes) in the United States

*The above commuting numbers represent those individuals who live in the City of Annapolis and commute to work, not those who live outside of the city and commute in.*

### Means of Transportation to Work in Annapolis city, Maryland

Drove alone - 72.5% +/- 2.5%



Carpool - 7.9% +/- 1.6%



Public transportation - 3.9% +/- 1.0%



Walked - 5.5% +/- 1.3%



Other means - 4.4% +/- 1.3%



Worked at home - 5.7% +/- 1.0%



0 10 20 30 40 50 60 70

## INCOME

### Earnings

**\$54,000** +/- \$3,798

Female median year-round, full-time earnings in Annapolis city, Maryland

**\$41,690** +/- \$70

Female median year-round, full-time earnings in the United States

*The above graphic demonstrates that, on average, women in the City of Annapolis earn considerably more than women in other parts of the United States.*

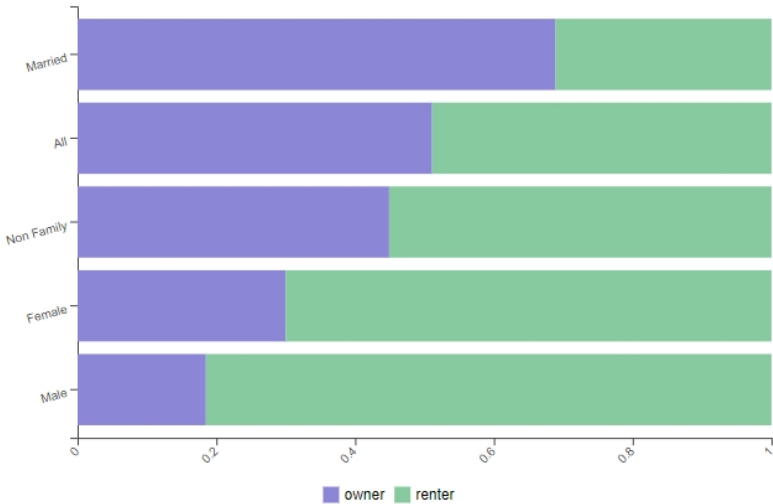
Median Earnings for Fulltime, Year-Round Workers by Sex in Annapolis city, Maryland

Male - \$60,775 +/- \$2,715

Female - \$54,000 +/- \$3,798



Annapolis Renter vs Owner Occupied by Household Type



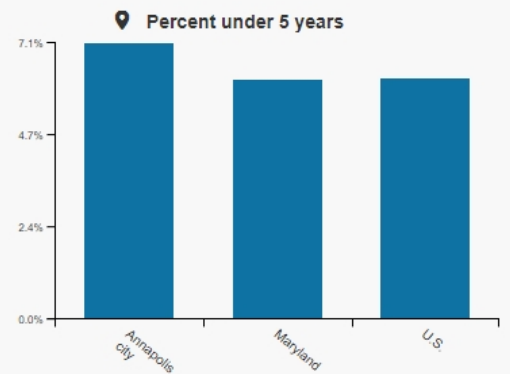
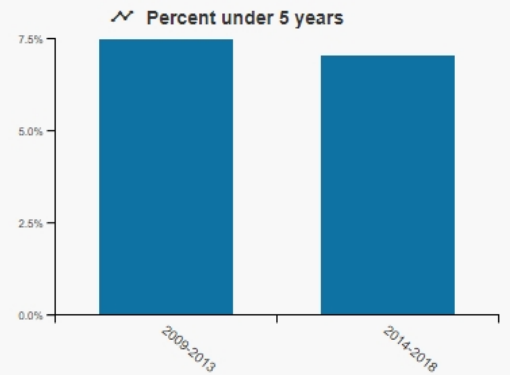
Annapolis Household Types

Type	Owner	Renter
Married	68.9%	31.1%
All	51.1%	48.9%
Non Family	44.9%	55.1%
Female	30%	70%
Male	18.5%	81.5%

51.1% Rate of Home Ownership

## Demographic Characteristics

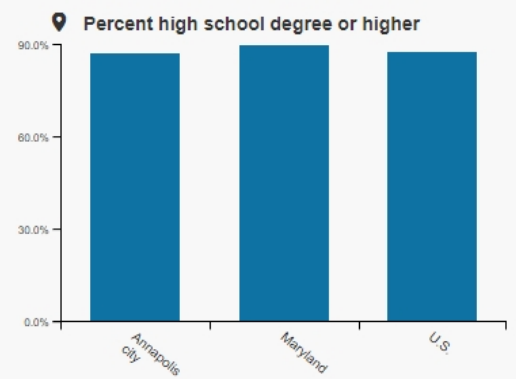
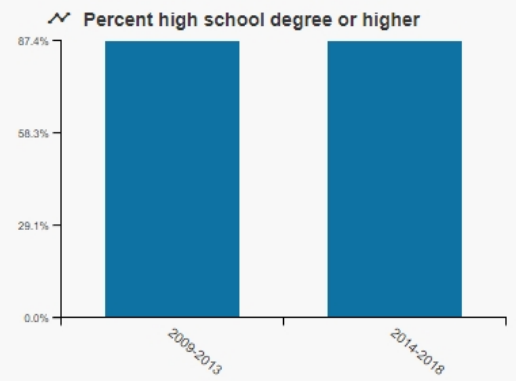
Name	Estimate		
Total population	39,147		
Percent under 5 years	7.1%		
Percent under 18 years	20.9%		
Percent 18 years and over	79.1%		
Percent 21 years and over	76.5%		
Percent 65 years and over	15.1%		
Percent White	62.21%		
Percent Black or African American	21.95%		
Percent American Indian and Alaska Native	0.16%		
Percent Asian	2.18%		
Percent Native Hawaiian and Other Pacific Islander	n/a		
Percent some other race	11.43%		
Percent two or more races	2.07%		
Percent Hispanic (of any race)	20.94%		



*These charts include information on total population and population by age, race and ethnicity from the 2009-2013 and 2014-2018 American Community Survey 5-Year Estimates.*

## Socioeconomic Characteristics

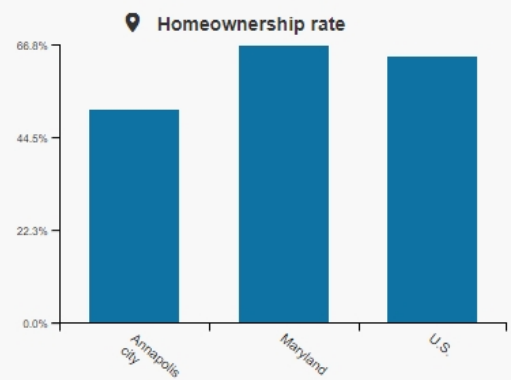
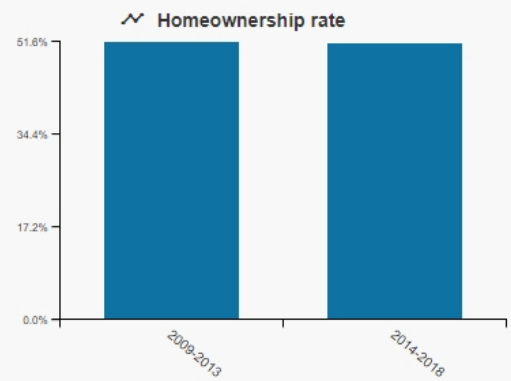
Name	Estimate		
Median household income	\$83,948		
Percent high school degree or higher	87.1%		
Percent Bachelor's degree or higher	47.1%		
Average household size	2.46		
Percent in poverty	11.2%		
Percent population 16 years and over in labor force	71.9%		
Percent employed	67.5%		
Percent disabled	11.5%		
Percent with health coverage	89.6%		
Average travel time to work (mins)	27.2		
Percent workers using public transportation	3.9%		
Percent veterans	10.2%		
Percent foreign born	15.6%		
Percent speaking Spanish at home			



*These charts include information on socioeconomic characteristics from the 2009-2013 and 2014-2018 American Community Survey 5-Year Estimates.*

## Housing Characteristics

Name	Estimate		
Owner-occupied housing units	8,012		
Renter-occupied housing units	7,652		
Single-family detached units	6,417		
Homeownership rate	51.1%		
Vacancy rate	9.2%		
Median owner-occupied housing unit value	\$413,300		
Median selected monthly owner cost	\$1,899		
Median rent (housing)	\$1,537		
Median year structure built	1973		



*These charts include information on housing characteristics from the 2009-2013 and 2014-2018 American Community Survey 5-Year Estimates.*

## Annapolis city, Maryland

2019 Population Estimates

**39,223**

*Source: Vintage 2019 Population Estimates*

Median Household Income

**\$ 83,948**

*Source: 2014-2018 American Community Survey 5-Year Estimates*

Persons in poverty, percent

**11.2 %**

*Source: 2014-2018 American Community Survey 5-Year Estimates*

Educational Attainment: Percent high school graduate or higher

**87.1 %**

*Source: 2014-2018 American Community Survey 5-Year Estimates*

Persons without health insurance, percent

**10.4 %**

*Source: 2014-2018 American Community Survey 5-Year Estimates*

Median Housing Value

**\$ 413,300**

*Source: 2014-2018 American Community Survey 5-Year Estimates*

Total Housing Units

**17,243**

*Source: 2014-2018 American Community Survey 5-Year Estimates*

Number of Firms

**5,426**

*Source: 2012 Survey of Business Owners: Company Summary*

Male Median Income

**\$ 42,119**

*Source: 2014-2018 American Community Survey 5-Year Estimates*

Female Median Income

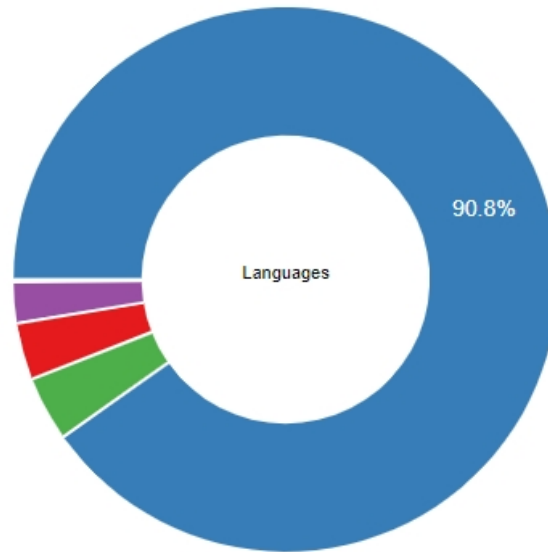
**\$ 35,394**

*Source: 2014-2018 American Community Survey 5-Year Estimates*



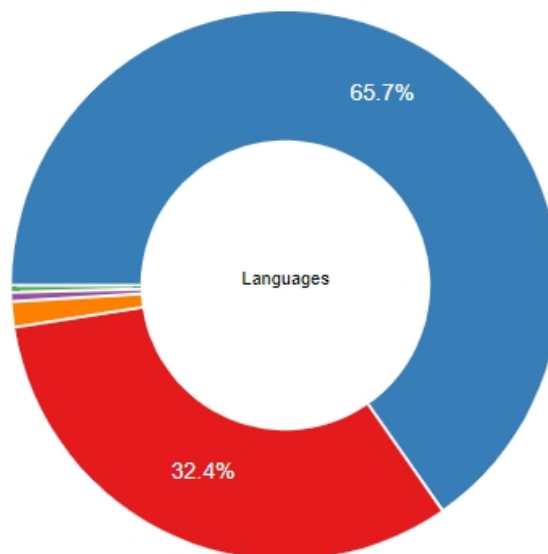
## Shifting Language Landscape

Ages 65+



■ Only English ■ Spanish ■ Other Indo-European Languages ■ Asian and Pacific Island Languages  
■ Other Languages

Ages 5 – 17

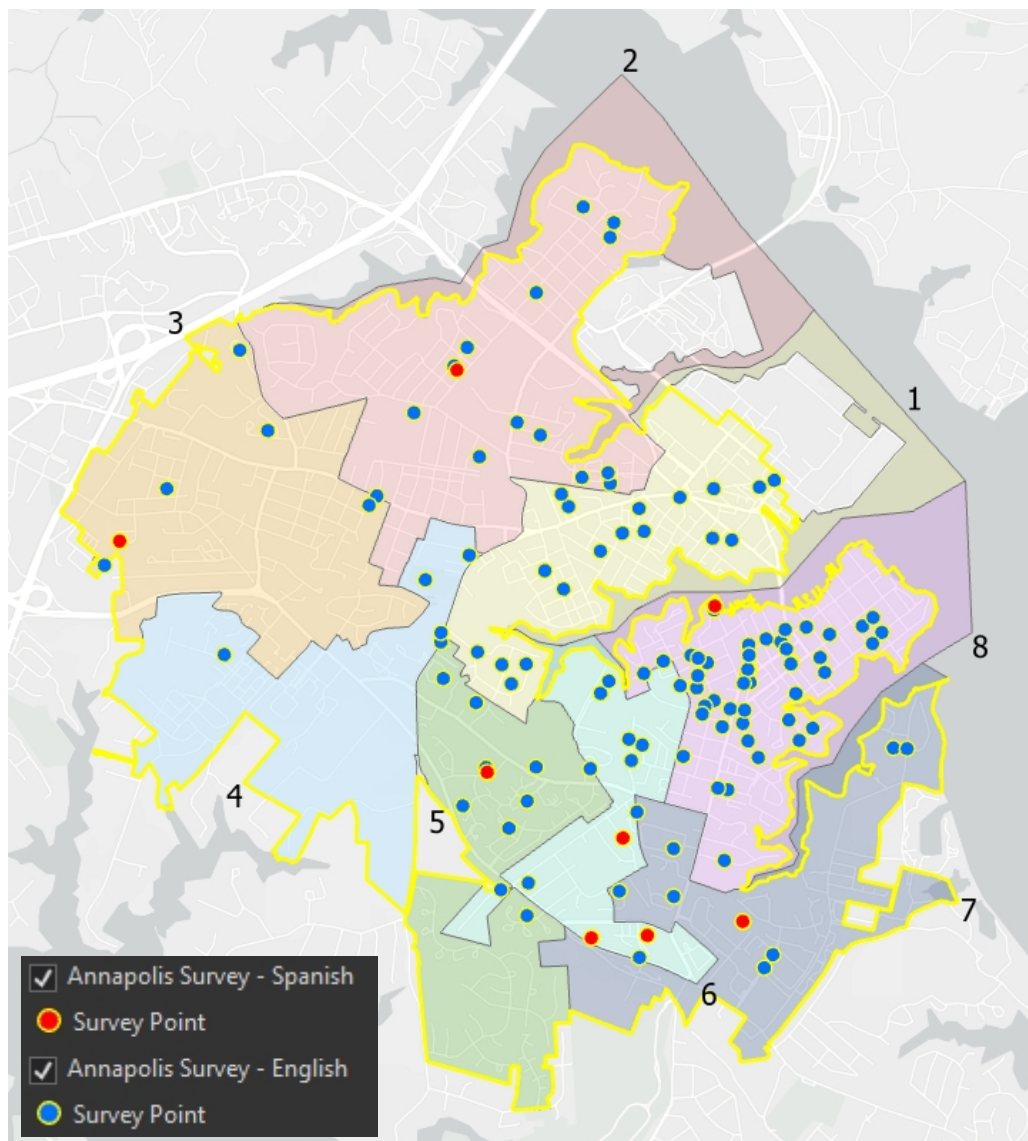


■ Only English ■ Spanish ■ Other Indo-European Languages ■ Asian and Pacific Island Languages  
■ Other Languages

## APPENDIX B: SURVEY QUESTIONS AND RESULTS

The survey results depicted in this appendix alternate between the English version and the Spanish version for the same question. This will allow for comparison between different populations, including those who cannot read/speak Spanish.

*The survey remains open and available to the public. This data will be refreshed periodically as numbers of survey takers rises significantly.*

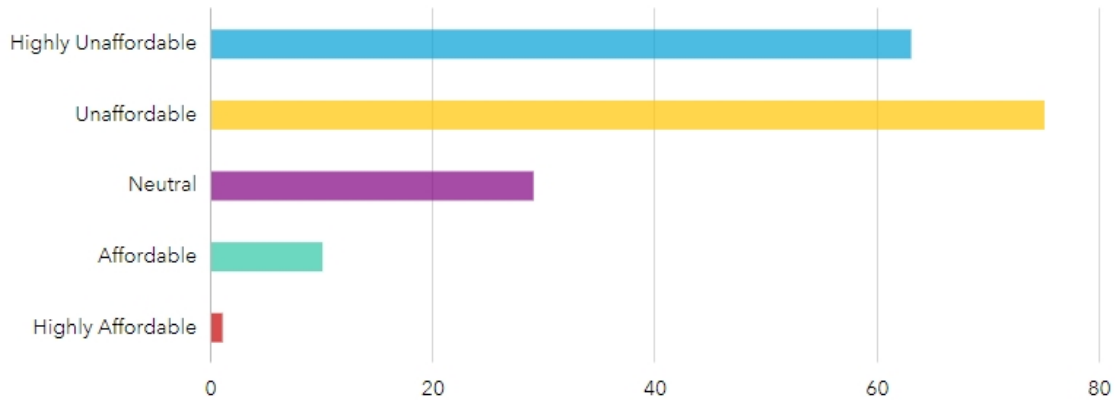


*The map above represents where people self-identified their location. The survey asked they not place the dot on their home (to avoid PII), but rather to place it near their home (on a street, park, intersection, etc.).*

*English survey takers are noted in blue, while Spanish survey takers are noted in red.*

How affordable do you believe housing is in Annapolis, MD? \*

Column Bar Pie Map

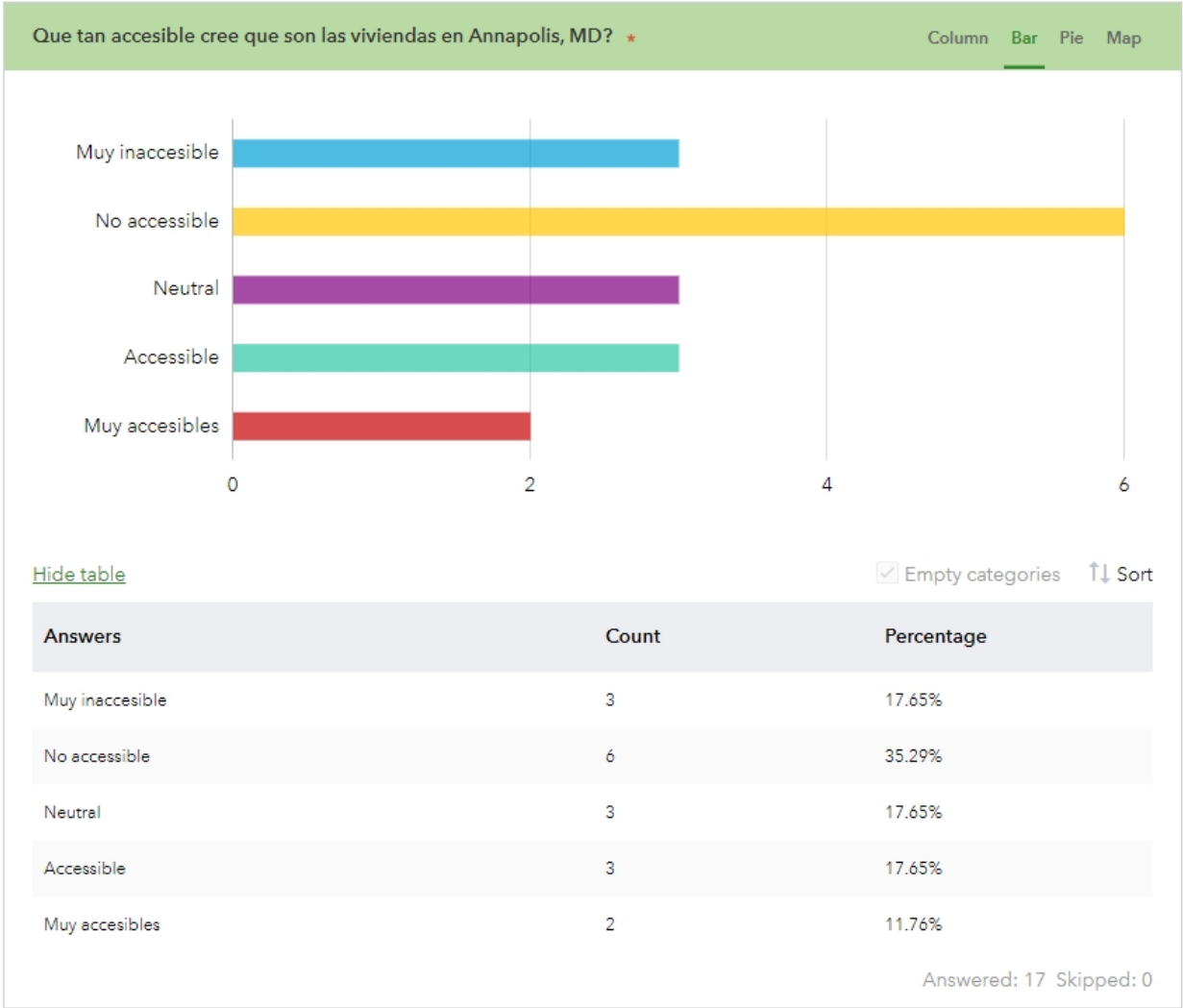


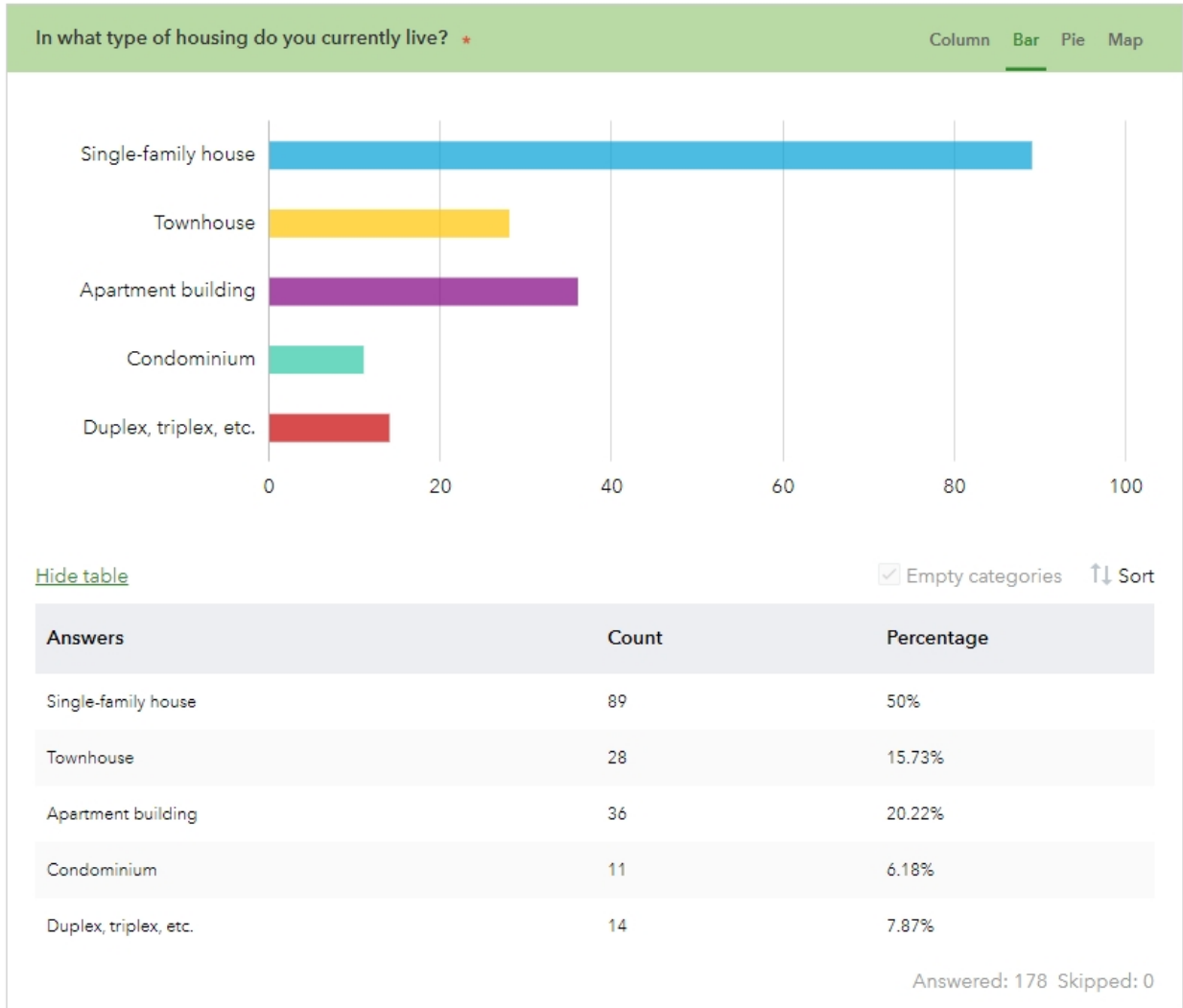
[Hide table](#)

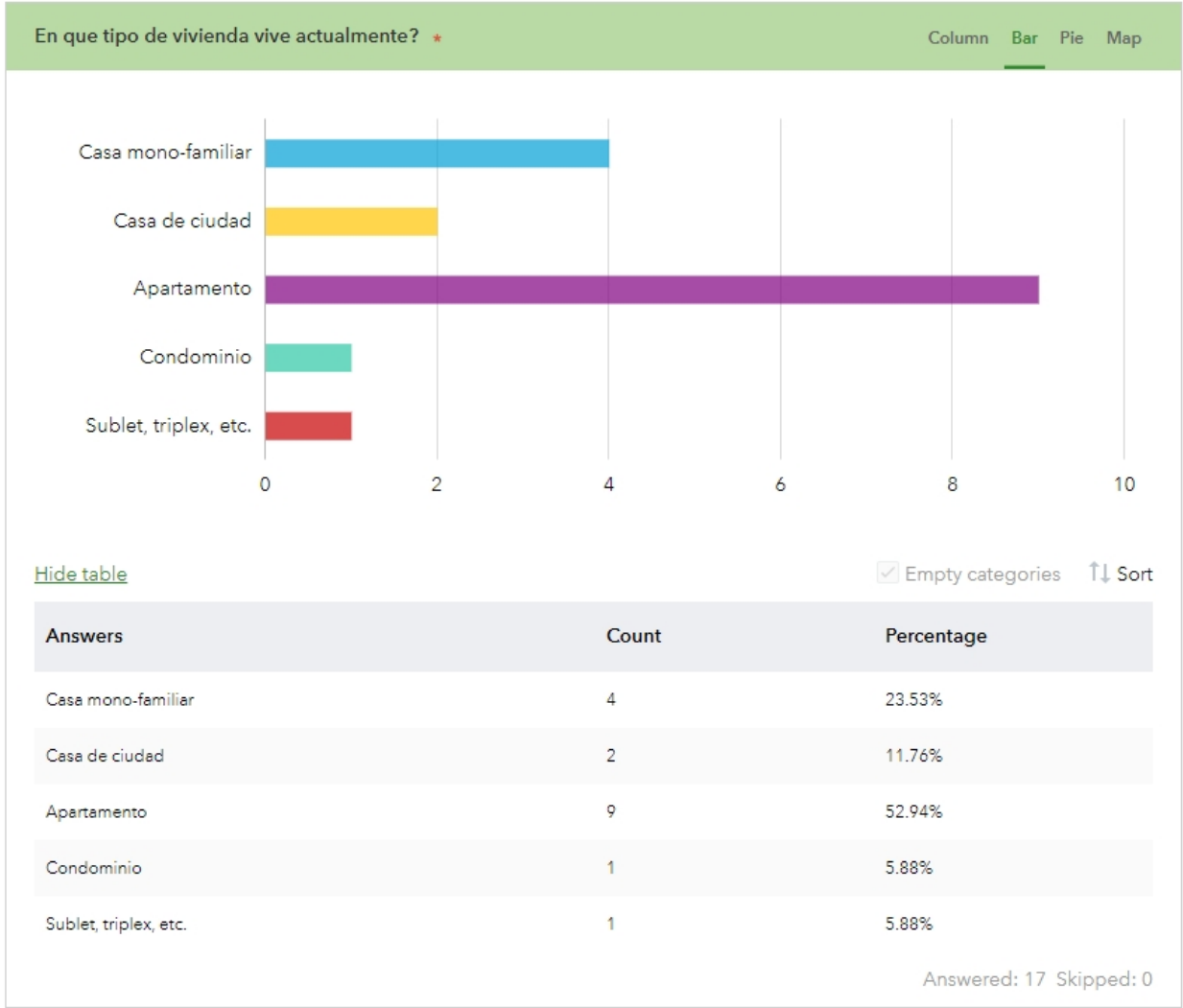
☒ Empty categories [Sort](#)

Answers	Count	Percentage
Highly Unaffordable	63	35.39%
Unaffordable	75	42.13%
Neutral	29	16.29%
Affordable	10	5.62%
Highly Affordable	1	0.56%

Answered: 178 Skipped: 0



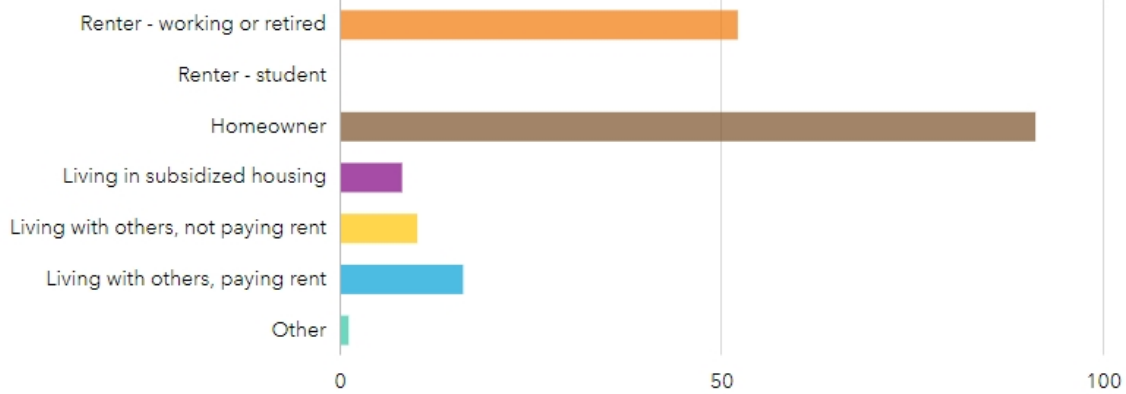






Which of the following best describes your current housing situation? \*

Column Bar Pie Map



[Hide table](#)

Other response

☒ Empty categories

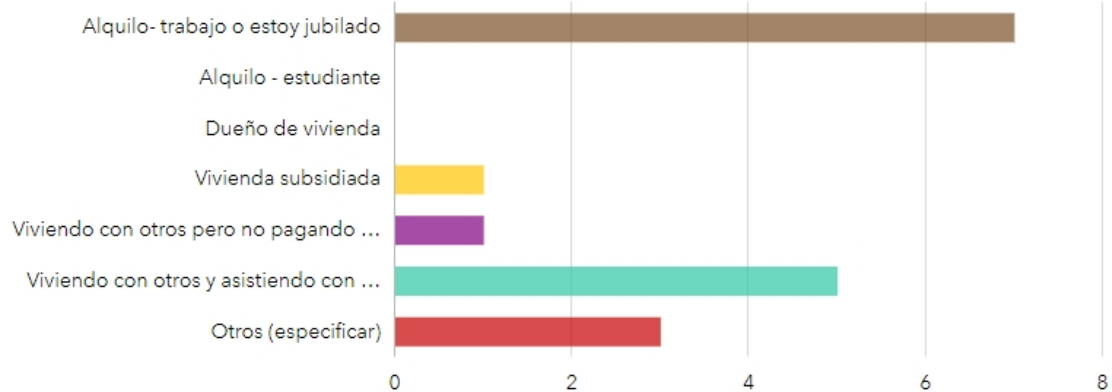
Sort

Answers	Count	Percentage
Renter - working or retired	52	29.21%
Renter - student	0	0%
Homeowner	91	51.12%
Living in subsidized housing	8	4.49%
Living with others, not paying rent	10	5.62%
Living with others, paying rent	16	8.99%
Other	1	0.56%

Answered: 178 Skipped: 0

Cual de las siguientes describe su situación de vivienda actualmente? \*

Column Bar Pie Map



[Hide table](#)

Other response ☒ Empty categories Sort

Answers	Count	Percentage
Alquilo- trabajo o estoy jubilado	7	41.18%
Alquilo - estudiante	0	0%
Dueño de vivienda	0	0%
Vivienda subsidiada	1	5.88%
Viviendo con otros pero no pagando alquiler o hipoteca	1	5.88%
Viviendo con otros y asistiendo con pagar alquiler o hipoteca	5	29.41%
Otros (especificar)	3	17.65%

Answered: 17 Skipped: 0

Are you satisfied with your current living arrangements? \*

Column Bar **Pie** Map



● Yes ● No

[Hide table](#)

☒ Empty categories [↑↓ Sort](#)

Answers	Count	Percentage
Yes	101	56.74%
No	77	43.26%

Answered: 178 Skipped: 0

¿Está satisfecho con su vivienda actual? \*

Column Bar **Pie** Map



● Si ● No

[Hide table](#)

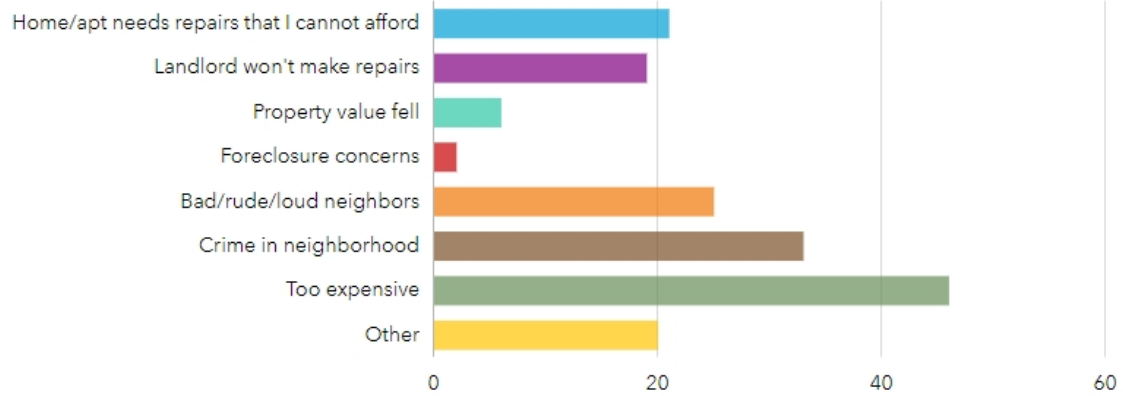
☒ Empty categories [↑↓ Sort](#)

Answers	Count	Percentage
Si	4	23.53%
No	13	76.47%

Answered: 17 Skipped: 0

If you are not satisfied, why? Skip if you are satisfied. Select all that apply.

Column Bar



[Hide table](#)

Other response

☒ Empty categories

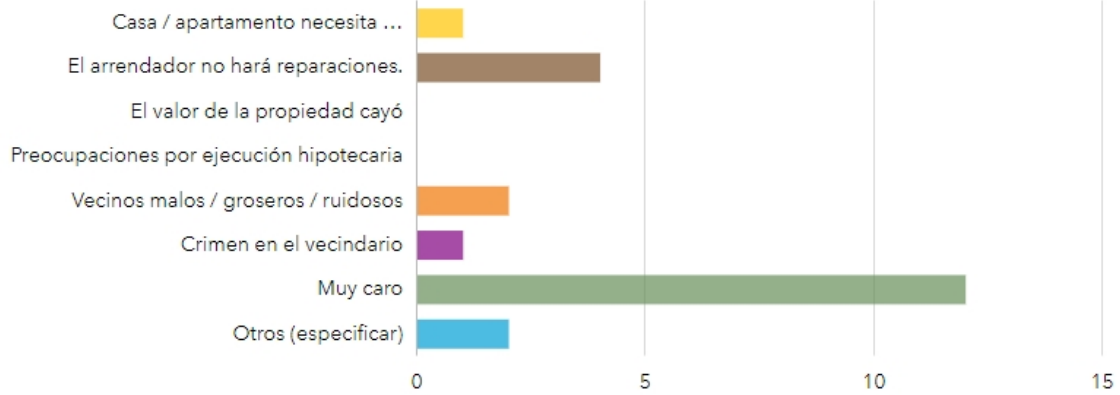
Sort

Answers	Count	Percentage
Home/apt needs repairs that I cannot afford	21	11.8%
Landlord won't make repairs	19	10.67%
Property value fell	6	3.37%
Foreclosure concerns	2	1.12%
Bad/rude/loud neighbors	25	14.04%
Crime in neighborhood	33	18.54%
Too expensive	46	25.84%
Other	20	11.24%

Answered: 86 Skipped: 92

Si no es así, díganos por qué. (Elija todas las que correspondan).

Column Bar



[Hide table](#)

☐ Other response ☒ Empty categories [Sort](#)

Answers	Count	Percentage
Casa / apartamento necesita reparaciones que no puedo pagar.	1	5.88%
El arrendador no hará reparaciones.	4	23.53%
El valor de la propiedad cayó	0	0%
Preocupaciones por ejecución hipotecaria	0	0%
Vecinos malos / groseros / ruidosos	2	11.76%
Crimen en el vecindario	1	5.88%
Muy caro	12	70.59%
Otros (especificar)	2	11.76%

Answered: 15 Skipped: 2



What factors are most important to you when choosing your home or apartment? Please rank in ord...



Column

Bar



¿Qué factores son los más importantes para usted a la hora de elegir su casa o apartamento? Selec...



Column

Bar



Would you be okay living in a diverse neighborhood? \*

Column Bar Pie Map

I am happy to live in a mixed community ...

I do not want to live near social housing

I do not want to live near affordable ...

0 50 100 150

[Hide table](#)

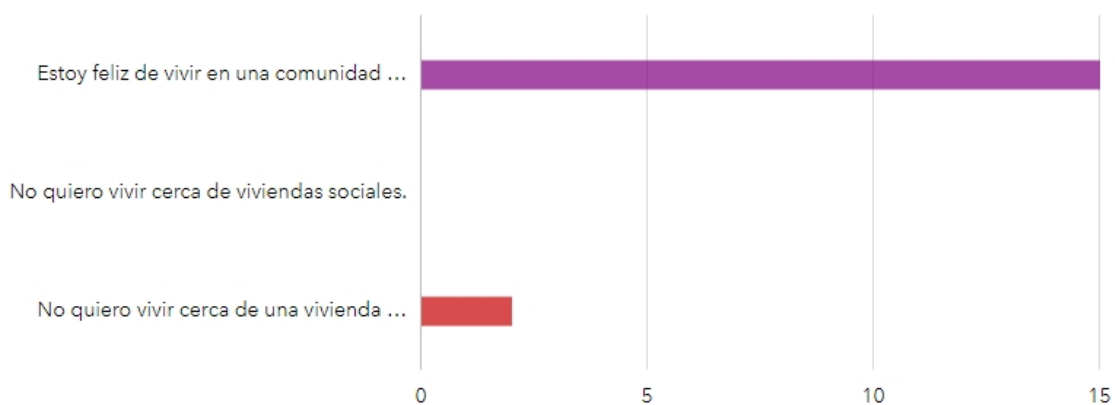
☒ Empty categories [Sort](#)

Answers	Count	Percentage
I am happy to live in a mixed community that includes social and affordable housing	141	79.21%
I do not want to live near social housing	24	13.48%
I do not want to live near affordable housing	13	7.3%

Answered: 178 Skipped: 0

¿Estaría bien viviendo en un vecindario diverso? \*

Column Bar Pie Map



[Hide table](#)

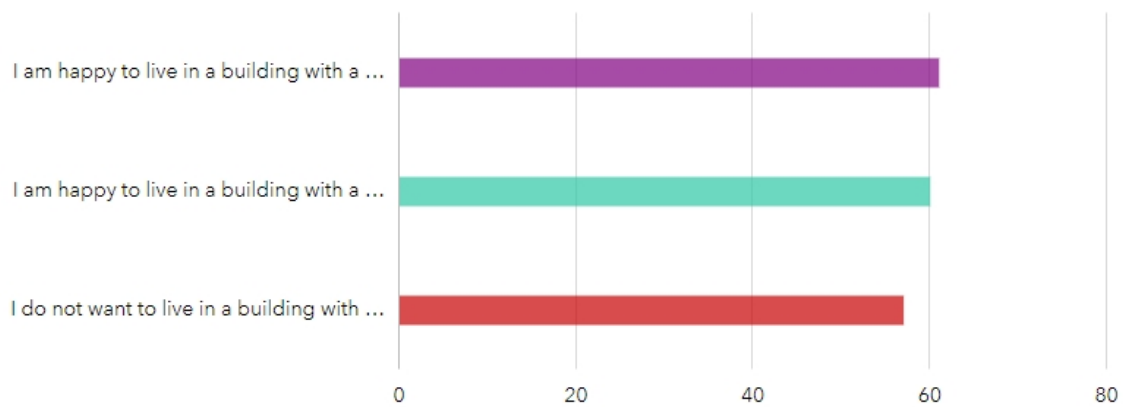
☒ Empty categories [↑↓ Sort](#)

Answers	Count	Percentage
Estoy feliz de vivir en una comunidad mixta que incluye viviendas sociales y accesibles.	15	88.24%
No quiero vivir cerca de viviendas sociales.	0	0%
No quiero vivir cerca de una vivienda accesible.	2	11.76%

Answered: 17 Skipped: 0

Would you be okay living in a diverse building? \*

Column Bar Pie Map



[Hide table](#)

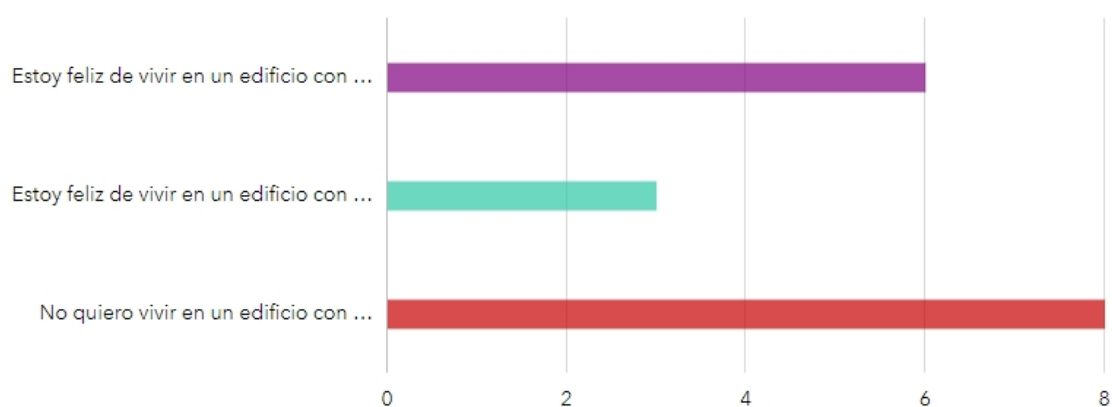
☒ Empty categories [↑↓ Sort](#)

Answers	Count	Percentage
I am happy to live in a building with a proportion of social housing	61	34.27%
I am happy to live in a building with a proportion of affordable housing	60	33.71%
I do not want to live in a building with social or affordable housing	57	32.02%

Answered: 178 Skipped: 0

¿Estaría bien viviendo en un edificio diverso? \*

Column Bar Pie Map



[Hide table](#)

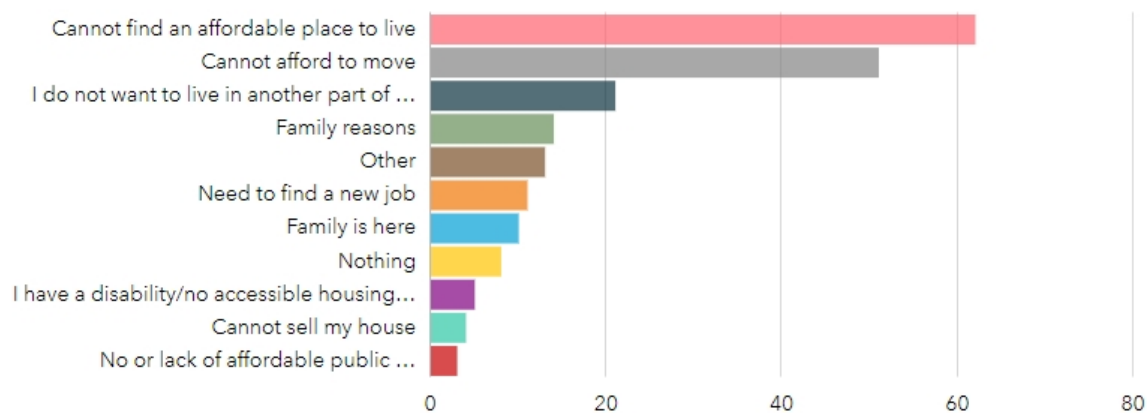
☒ Empty categories [↑↓ Sort](#)

Answers	Count	Percentage
Estoy feliz de vivir en un edificio con una proporción de viviendas sociales	6	35.29%
Estoy feliz de vivir en un edificio con una proporción de viviendas asequibles	3	17.65%
No quiero vivir en un edificio con vivienda social o asequible	8	47.06%

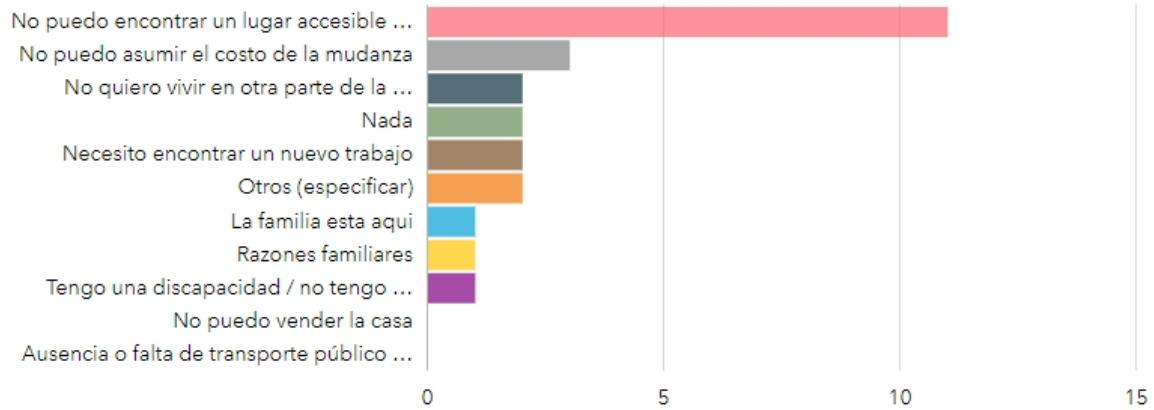
Answered: 17 Skipped: 0

OPTIONAL: If you are interested in moving, what are the three main reasons why you have not moved yet? ...

Column Bar

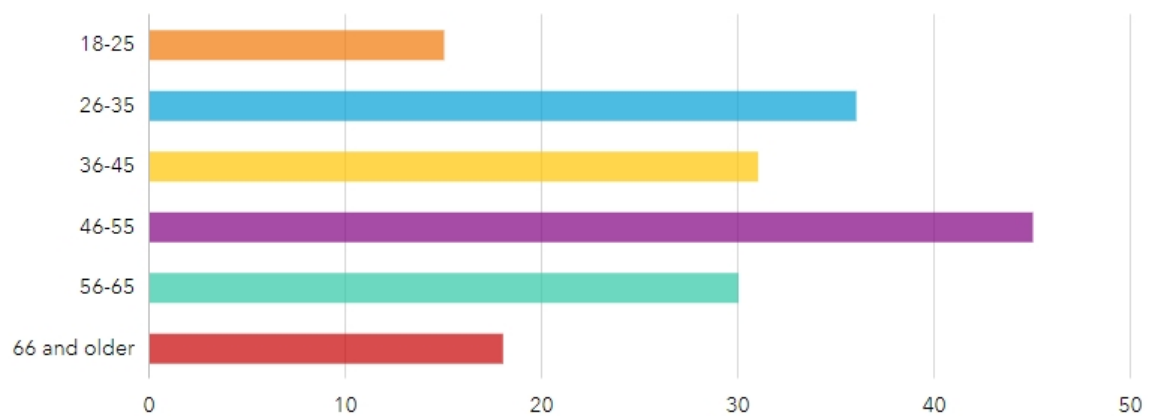


OPCIONAL: Si está interesado en mudarse de su hogar actual, ¿cuáles son las tres razones principales por l... Column Bar



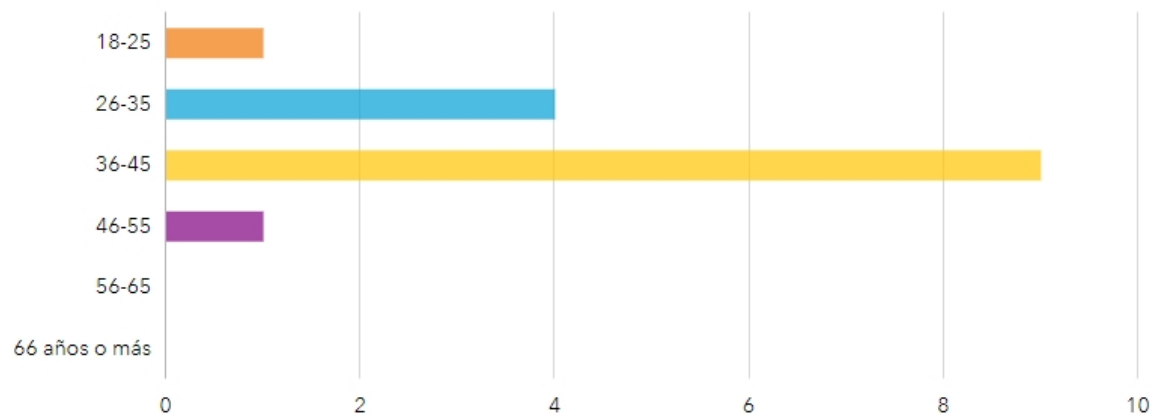
OPTIONAL: Which age group are you in?

Column Bar Pie Map



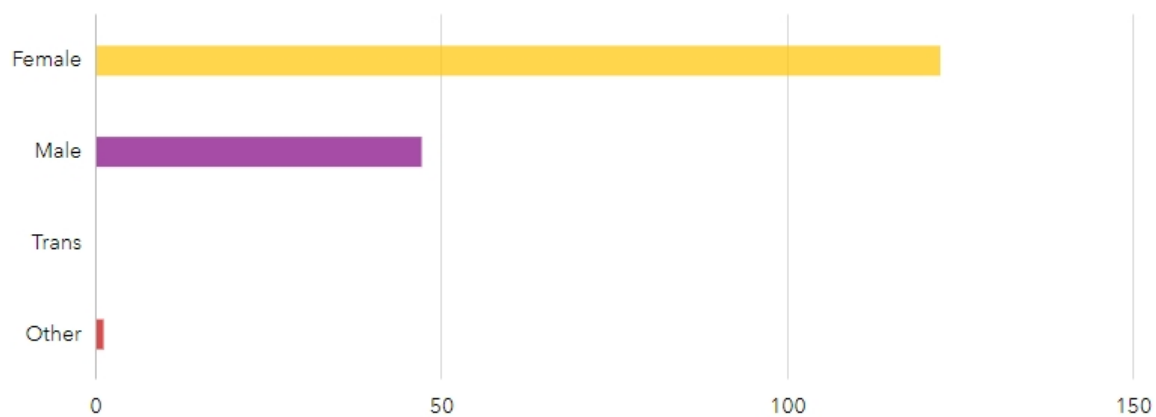
OPCIONAL: ¿En qué grupo etáreo se encuentra?

Column Bar Pie Map



OPTIONAL: How do you identify your sex / gender?

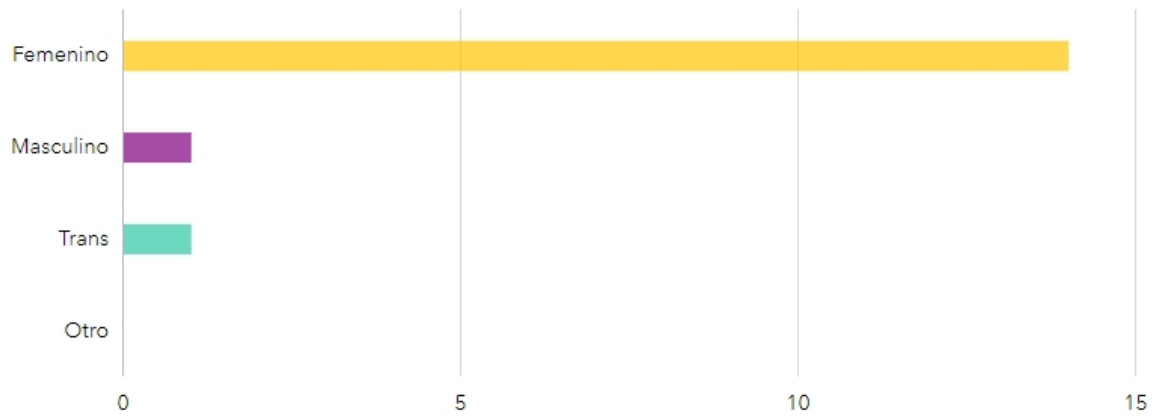
Column Bar Pie Map





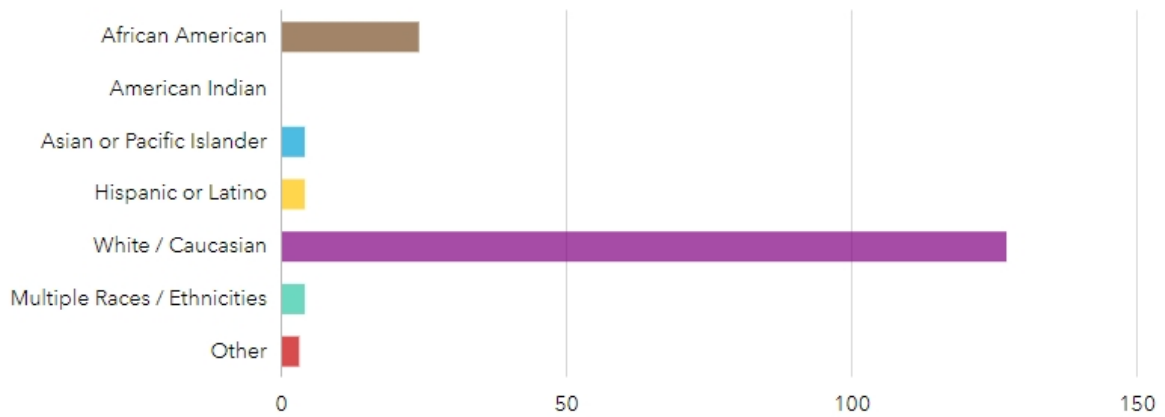
OPCIONAL: ¿Cómo identifica su género?

Column Bar Pie Map



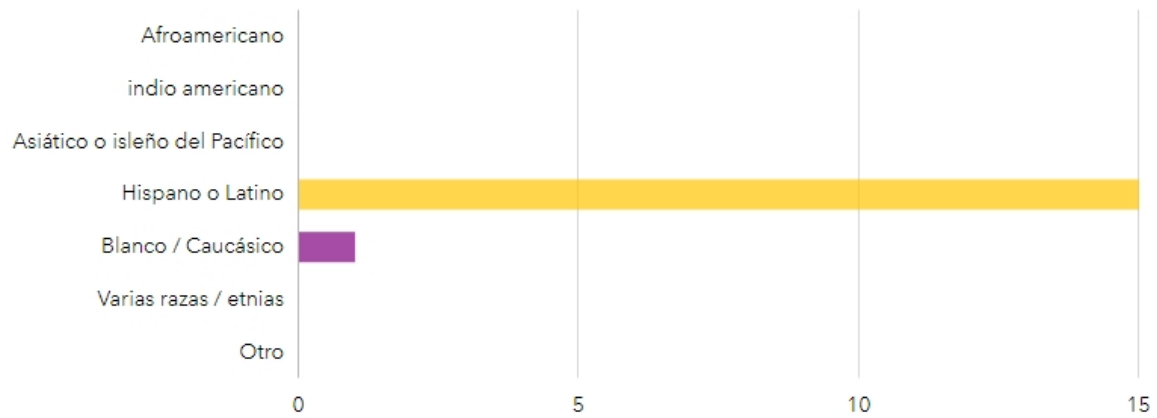
OPTIONAL: How would you describe yourself?

Column Bar Pie Map

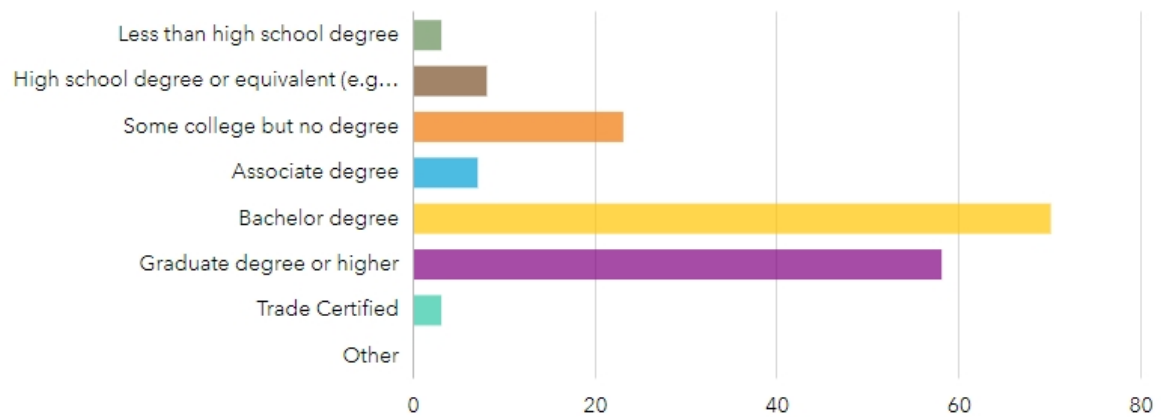


OPCIONAL: ¿Cómo se describiría a sí mismo?

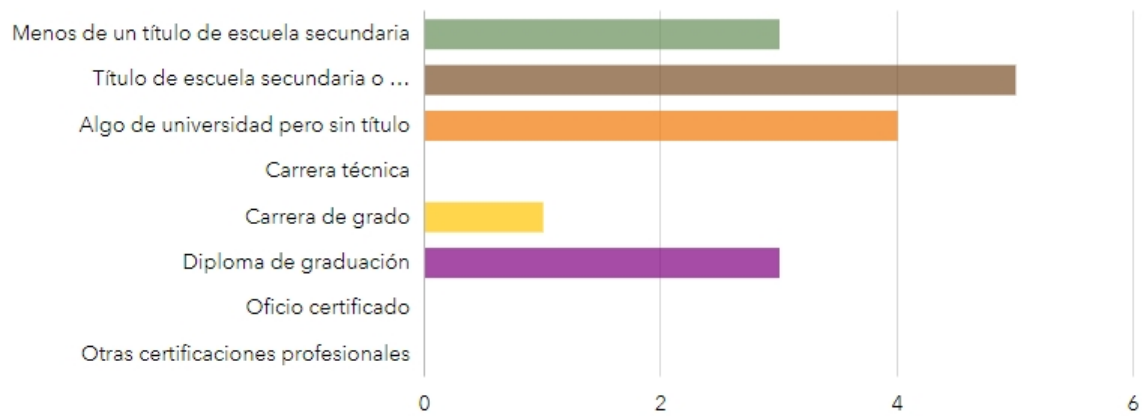
Column Bar Pie Map



OPTIONAL: Education. What is the highest level of school you have completed or the highest d... Column Bar Pie Map

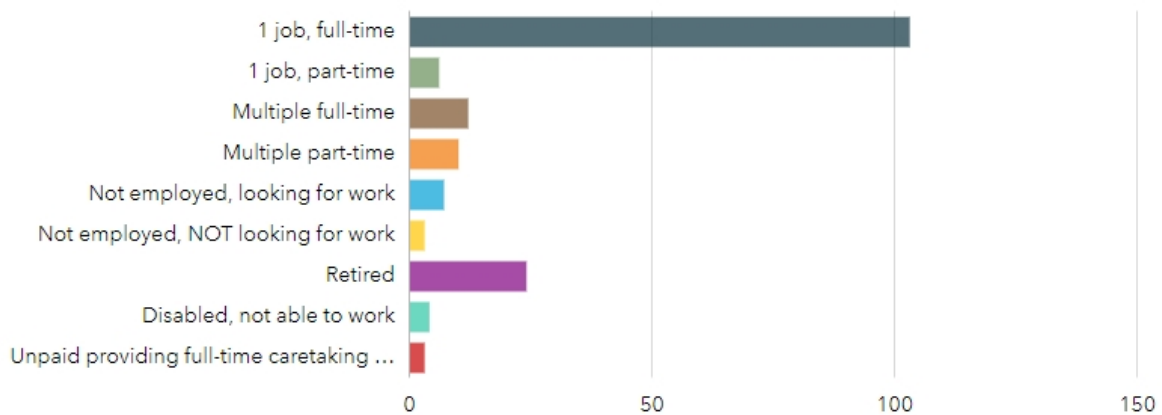


OPCIONAL: Educación (seleccione una mejor respuesta). ¿Cuál es el nivel más alto de estudios... Column Bar Pie Map



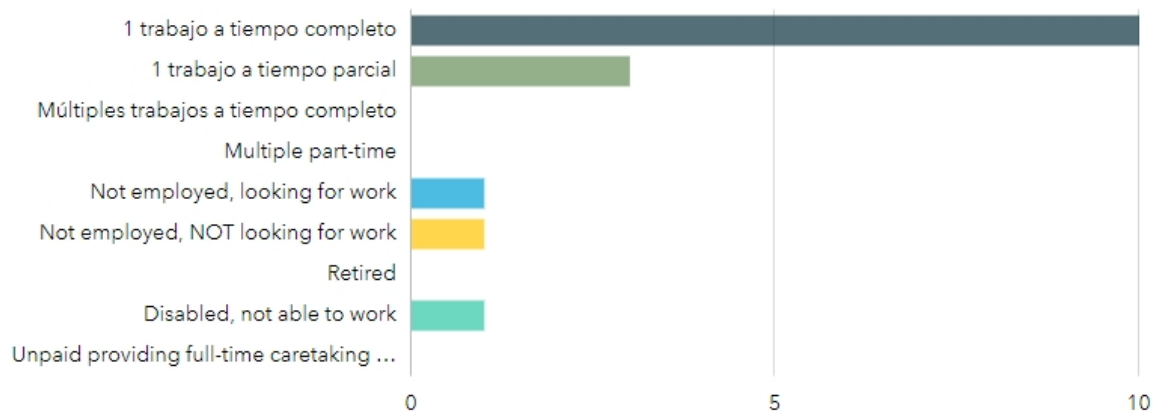
OPTIONAL: Employment. How would you describe your Employment status?

Column Bar Pie Map



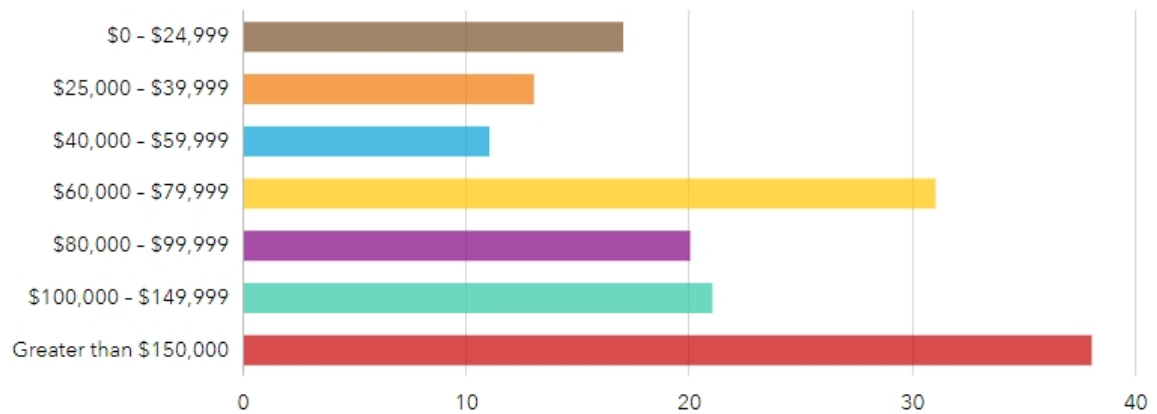
OPCIONAL: Empleo. ¿Cómo describiría su situación laboral?

Column Bar Pie Map

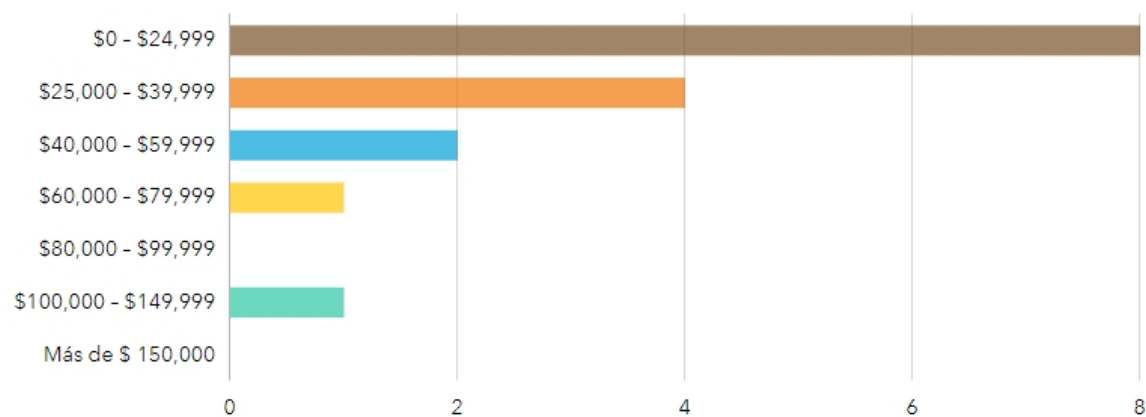


OPTIONAL: Household Income. How much total combined money did all members of your household make in the last 12 months?

Column Bar Pie Map



OPCIONAL: Ingresos del hogar. ¿Cuánto dinero combinado en total ganaron todos los miembr... Column Bar Pie Map



## APPENDIX C: CITY OF ANNAPOLIS WEBSITE DATA

*Data from City of Annapolis website (data collected in 2013):*  
<https://www.annapolis.gov/813/Demographic-Statistical-Profile>

### Households & Housing Units

- Households: 16,473
- Non-Family Households: 7,360
- Homeownership rate: 51.6%
- Living in same house 1+ years: 83.1%

### Employment

- % in labor force: 70.80%
- % in labor force: Civilian 69.6%
- % in labor force: Armed Forces 1.2%
- % not in labor force: 29.2%
- % unemployed (civilian labor force): 3.9%

### Employment by Industry (%)

Employment	Percentage Employed
Agriculture, forestry, fishing, hunting, and mining	0.1%
Construction	7.8%
Manufacturing	3.4%
Wholesale Trade	1.5%
Retail Trade	9.1%
Transportation and Warehousing and Utilities	3.1%
Information	2.5%
Finance, Insurance and Real Estate	6.3%
Education, Health and Social Services	20%
Arts, Entertainment, Recreation and Hospitality	10.9%

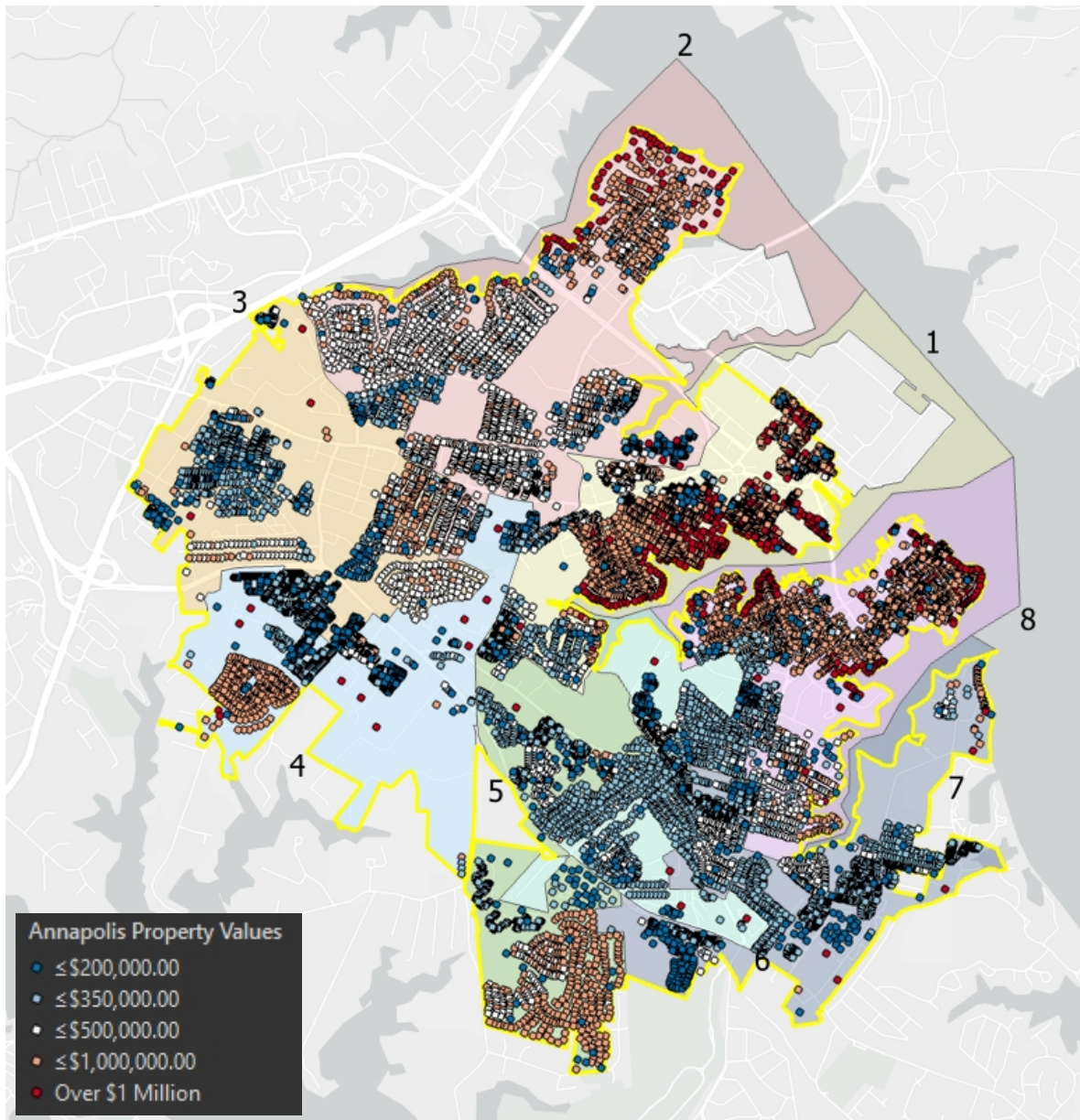
Employment	Percentage Employed
Professional, Scientific, Management Administrative and Waste Management	17.3%
Public Administrative	12.1%
Other Services	6%



## APPENDIX D: ANNAPOLIS PROPERTY VALUE ANALYSIS

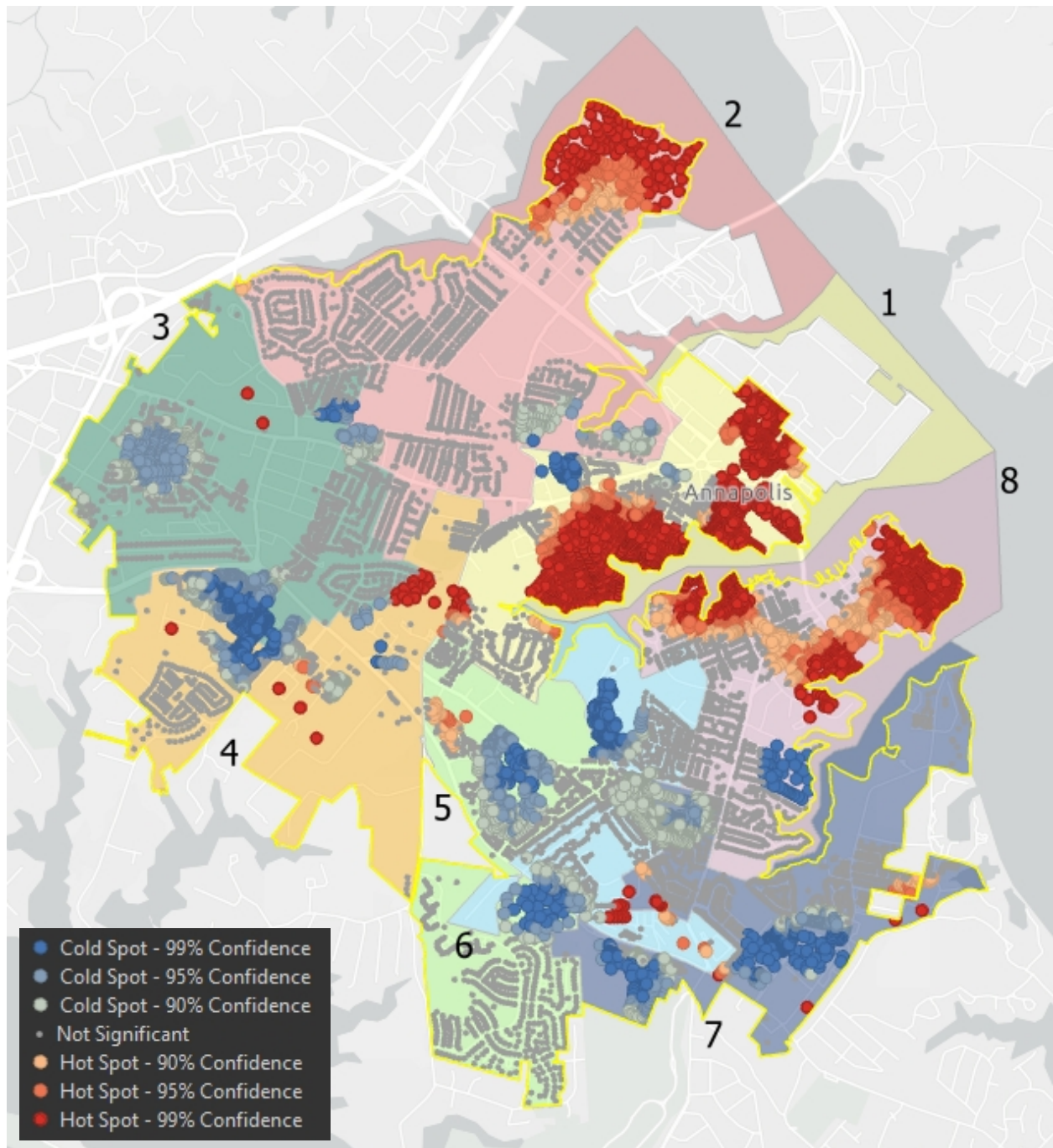
*This appendix will not duplicate the maps already present in the Annapolis Five-Year Consolidated Housing and Community Development Plan. To view those maps, please see the following document, beginning with page 209: <https://www.annapolis.gov/DocumentCenter/View/10964/City-of-Annapolis-Consolidated-Plan-and-Annual-Action-Plan-Final-2021-2025-PDF>*

### Annapolis Property Values



*This map depicts data from the first geospatial analysis focused on the property values distributed across the City of Annapolis.*

### Annapolis Parcel Land Value Hotspot Analysis (Not Normalized)

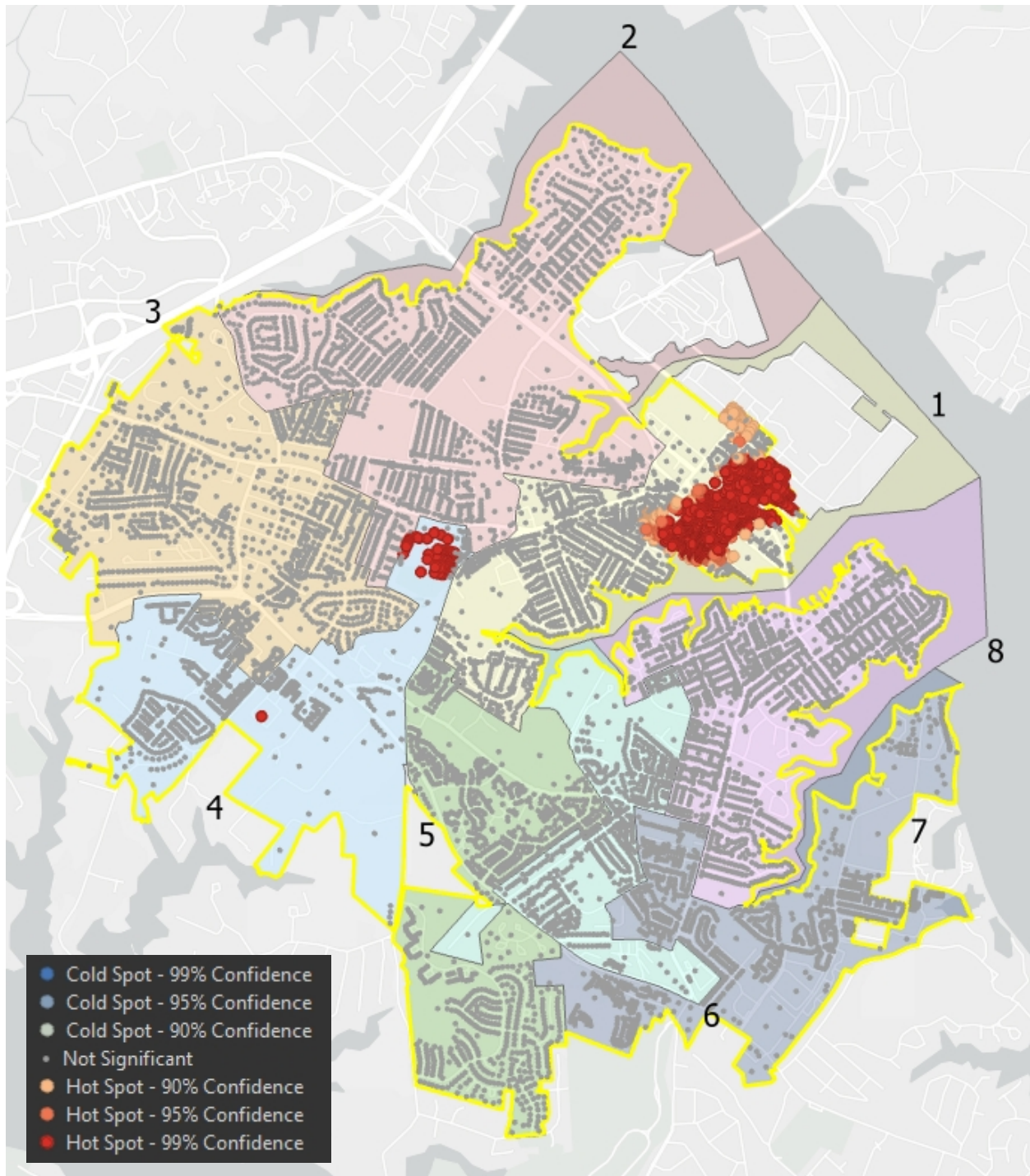


*An analysis of the property values (with the structure value removed) demonstrates the value of land varying considerably across the City of Annapolis. As one might assume, a structure's proximity to the water heavily influences the value of the land on which it is built. Blue represents cold spots, or land with lesser values.*

*Land value is not normalized by acreage in this map.*



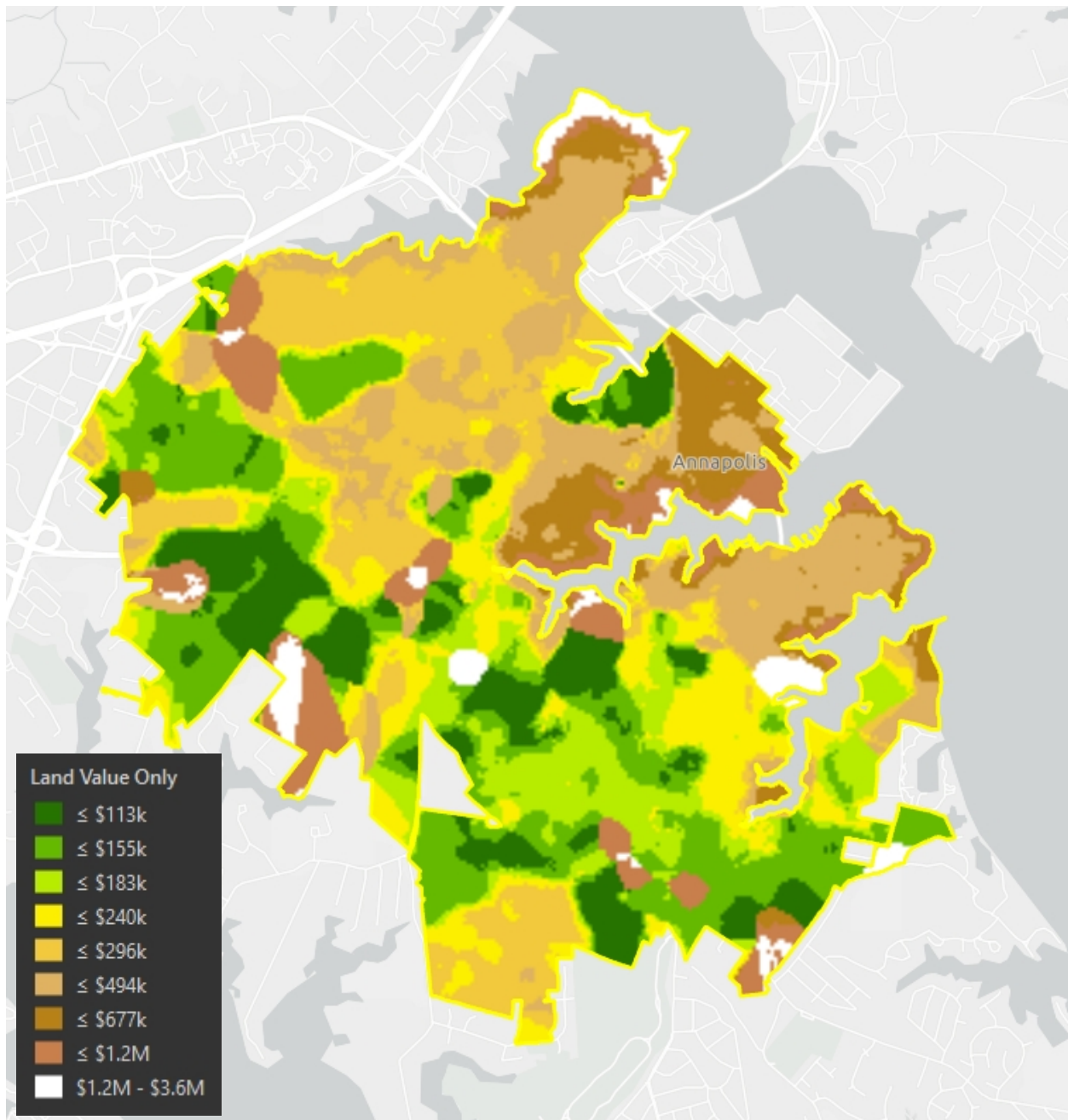
### Annapolis Parcel Land Value Hotspot Analysis (Normalized by Acreage)



*Interestingly, once land value was divided by acreage in order to normalize the data, hot spot analysis revealed the increased values of land with proximity to downtown Annapolis.*

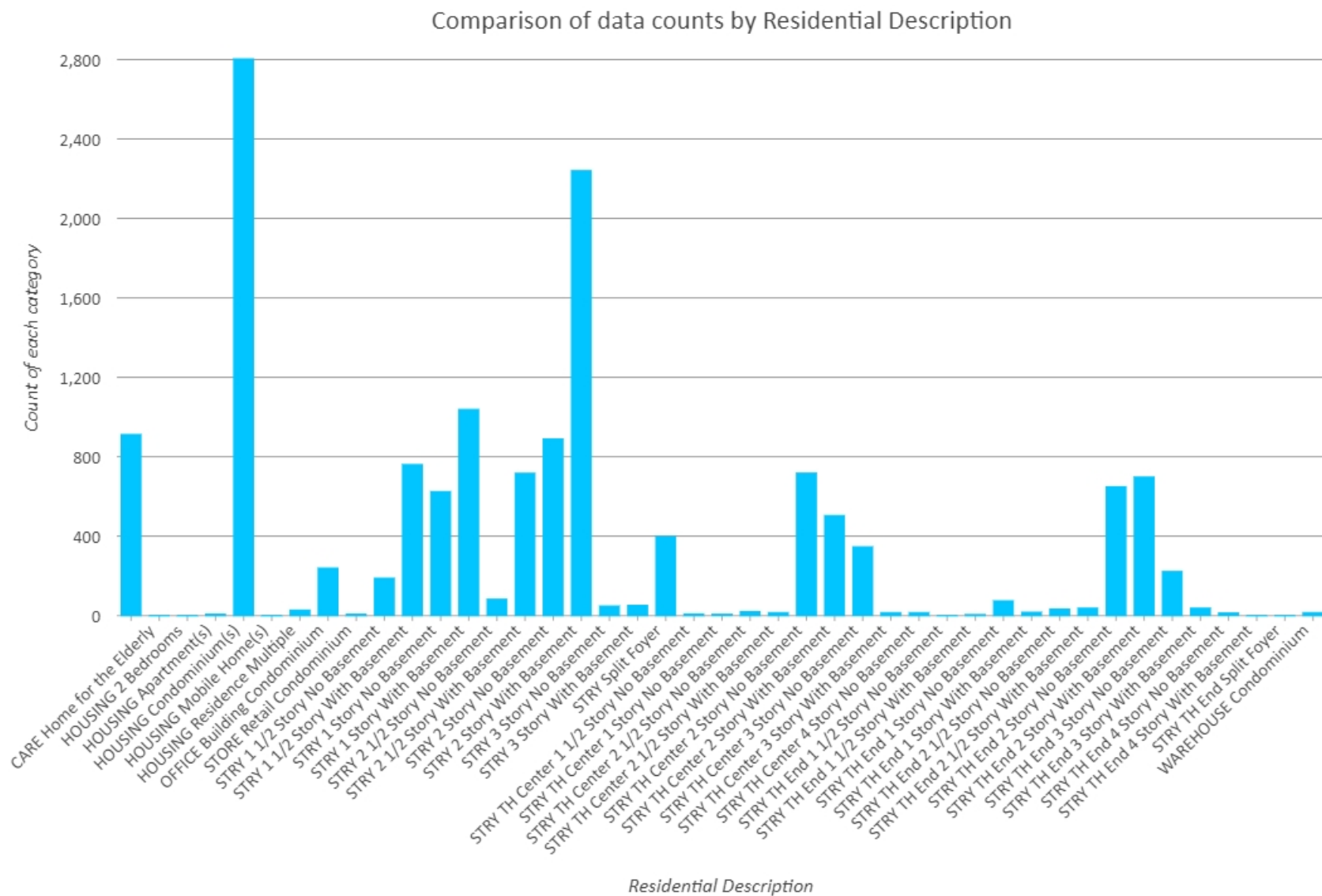
*Land value is normalized by acreage in this map.*

### Kriging Interpolation Modeling of Land Value Only (Improved/Structure Value Removed)

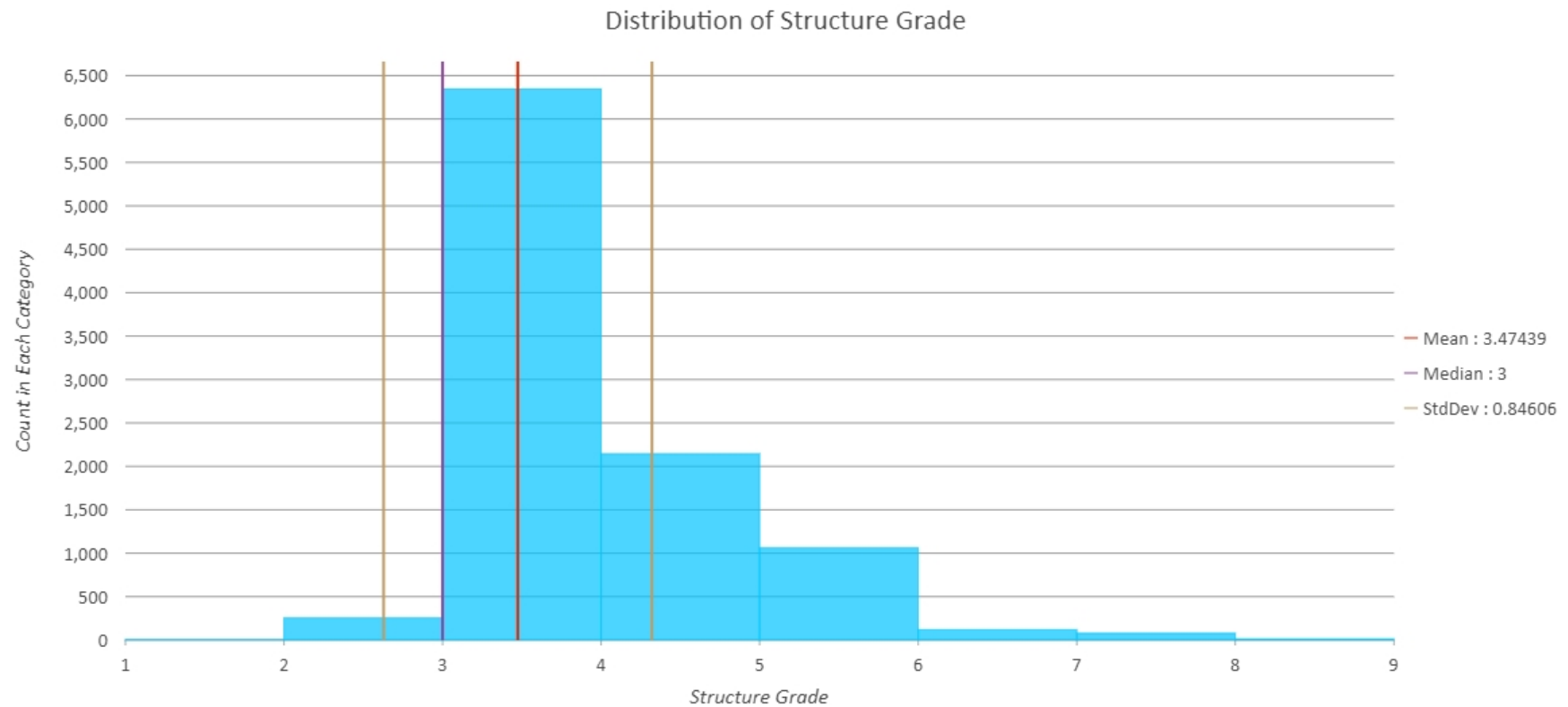


*Note: raster is classified using a quantile distribution method across nine (9) classes.*

### Breakdown of Residential Structure Types



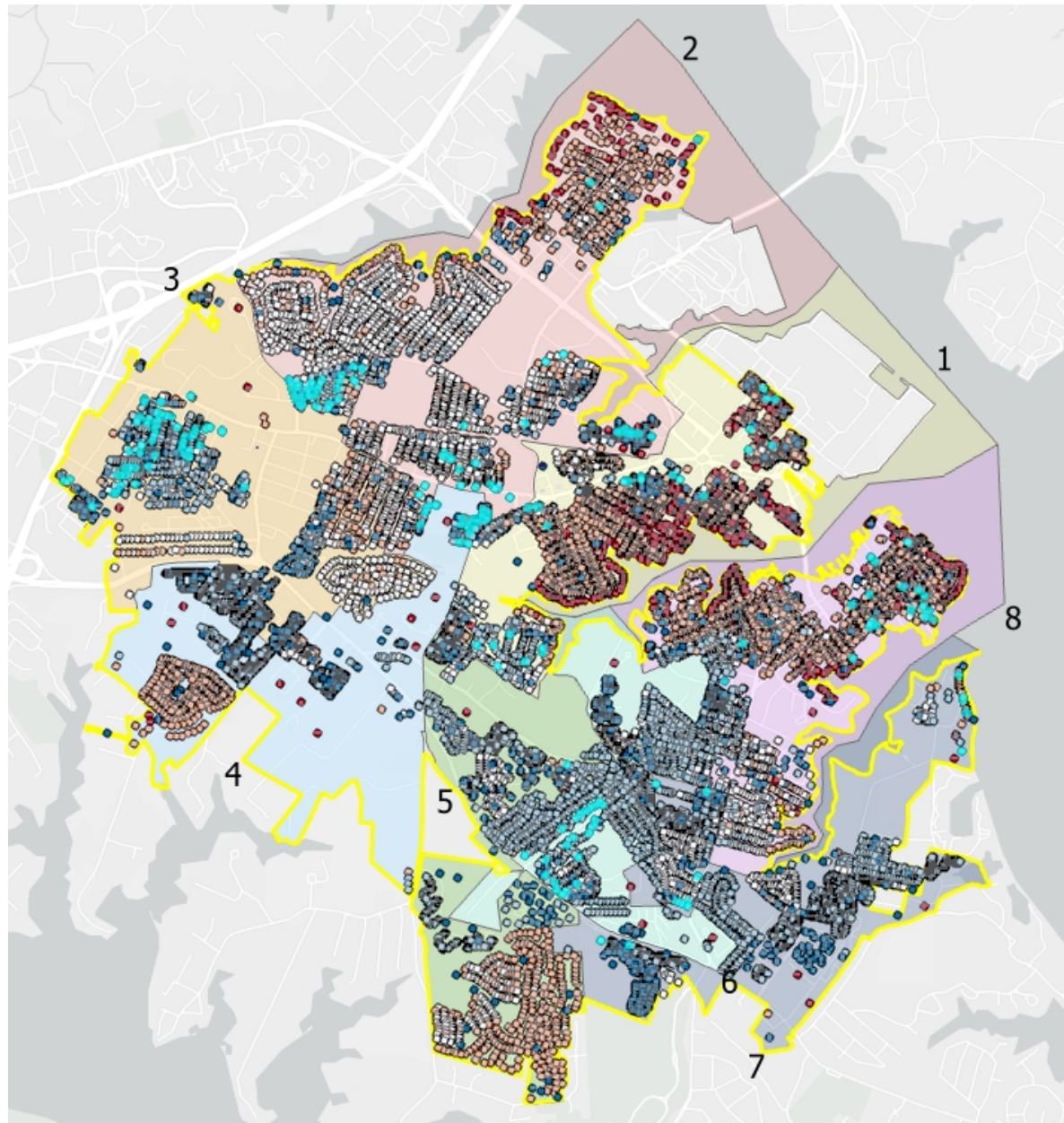
## Rating of Structure Condition by the City of Annapolis

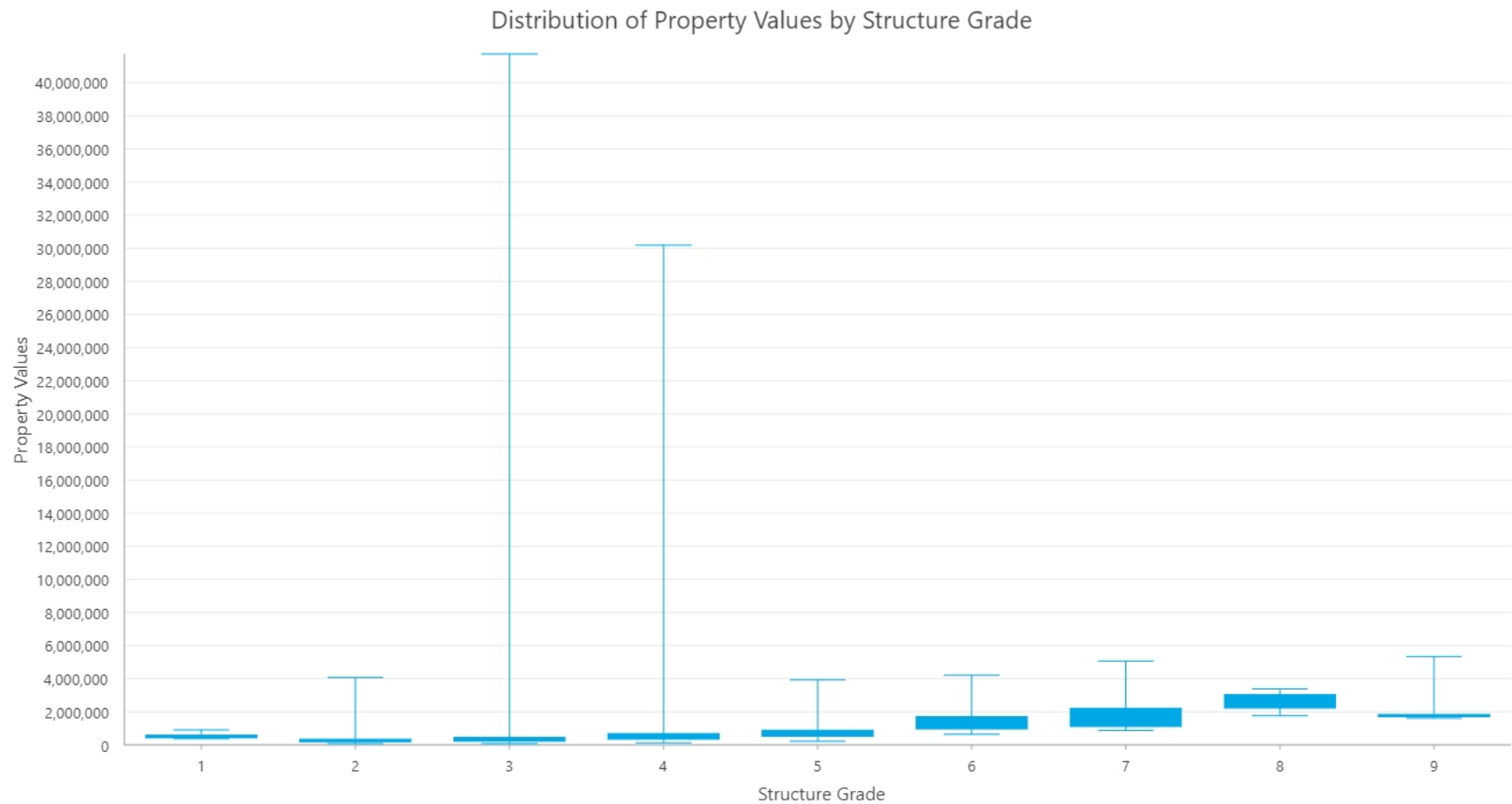


*Structures are rated based on the condition of the structure through tax assessors. The chart above is a histogram indicating the condition of structures within the City of Annapolis. As indicated, most structures are rated as a three (3) in their current condition, which means below average.*

*The following map highlights those structures that fall within ratings 1 and 2. The City of Annapolis could potentially look for options to turnover residential construction stock within the city in order to encourage newer, more efficient use of land.*



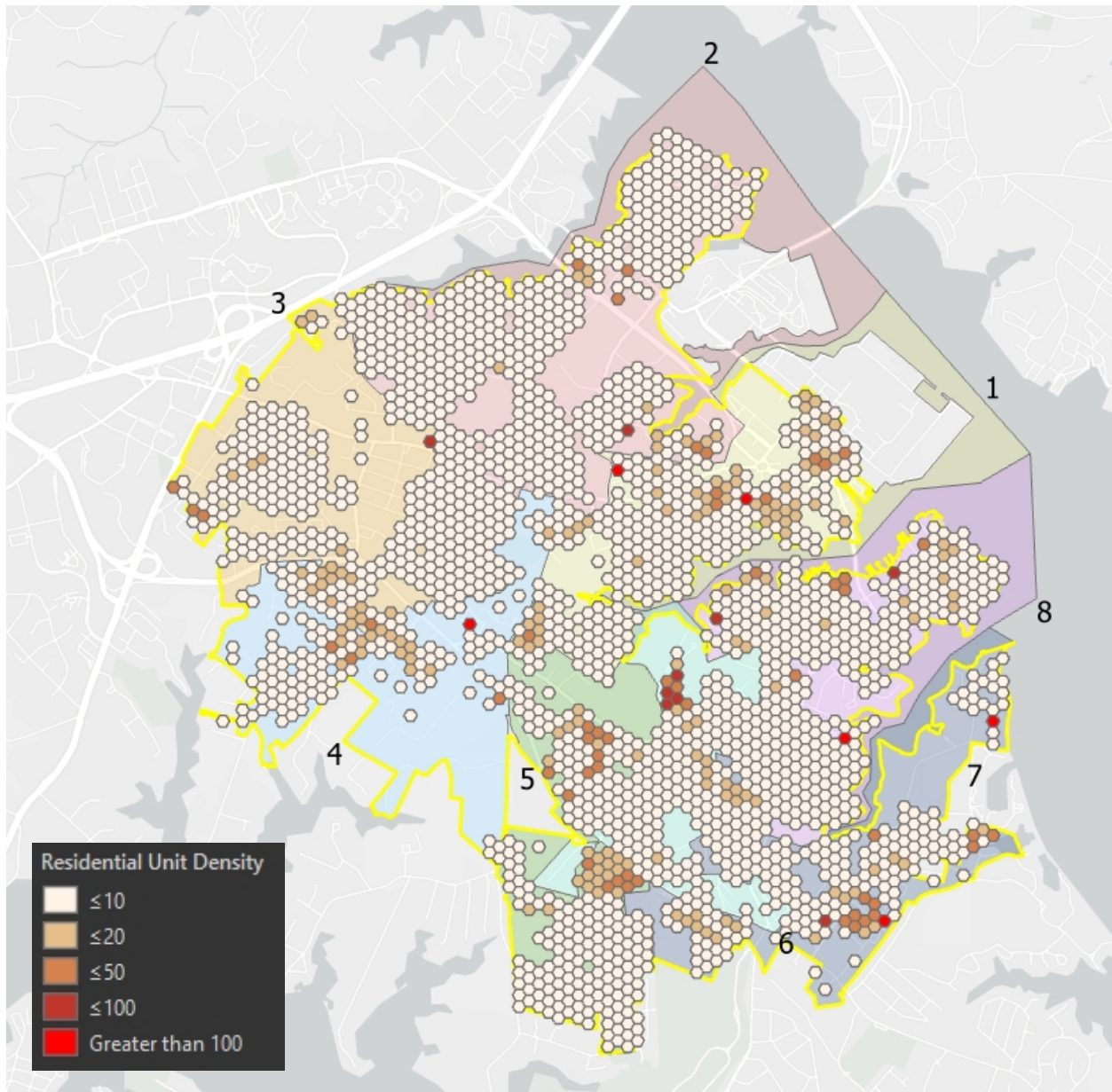




*Note: there are four (4) structures (apartment complexes) which are in categories 3 and 4. These structures are outliers, creating the long head on the boxplot. Those apartment complexes are:*

- 1. Admiral Oaks*
- 2. Bay Forest Center*
- 3. Fairwinds*
- 4. The Village Greens of Annapolis*





*The Needs Assessment Subcommittee examined the density at which residential units are located within the City of Annapolis. As one might expect, this map shows residential density the city is not evenly distributed. However, the distribution may be insightful.*

## APPENDIX E: WARD BREAKDOWN OF POPULATION TRENDS AND KEY INDICATORS

### City of Annapolis: All Wards

ANNAPOLIS

Analysis by Q. Cummings



## POPULATION TRENDS AND KEY INDICATORS

ANNAPOLIS

40,134	16,559	2.38	38.5	\$83,875	\$437,751	141	104	75
Population	Households	Avg Size Household	Median Age	Median Household Income	Median Home Value	Wealth Index	Housing Affordability	Diversity Index

### MORTGAGE INDICATORS



\$13,532

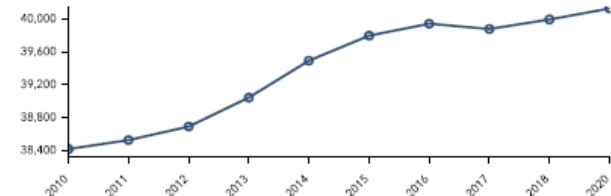
Avg Spent on Mortgage & Basics



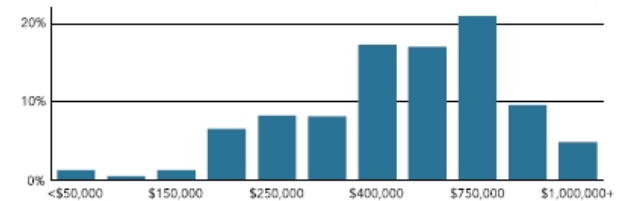
21.8%

Percent of Income for Mortgage

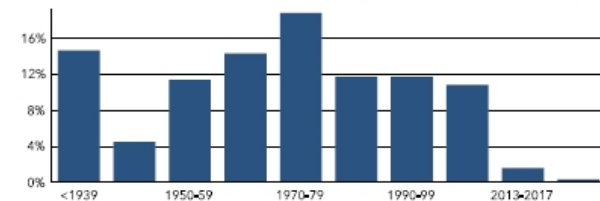
### Historical Trends: Population



### Home Value



### Housing: Year Built



### POPULATION BY AGE



■ Under 18 (22%) ■ Ages 18 to 64 (61%) ■ Aged 65+ (18%)

### POPULATION BY GENERATION



7.8%

Greatest Gen:  
Born 1945/Earlier



20.4%

Baby Boomer:  
Born 1946 to 1964



19.4%

Generation X:  
Born 1965 to 1980



26.1%

Millennial:  
Born 1981 to 1998



21.3%

Generation Z:  
Born 1999 to 2016



5.0%

Alpha: Born  
2017 to Present



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## City of Annapolis: Ward 1

Eleanor "Elly" Tierney

Analysis by Q. Cummings



# POPULATION TRENDS AND KEY INDICATORS

Eleanor "Elly" Tierney

5,173	2,224	2.14	40.1	\$110,227	\$660,224	213	90	50
Population	Households	Avg Size Household	Median Age	Median Household Income	Median Home Value	Wealth Index	Housing Affordability	Diversity Index

## MORTGAGE INDICATORS



\$19,442

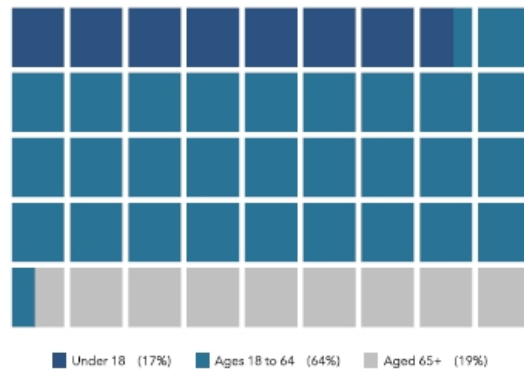
Avg Spent on Mortgage & Basics



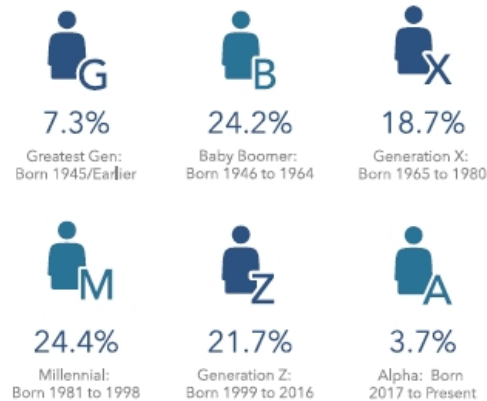
25.0%

Percent of Income for Mortgage

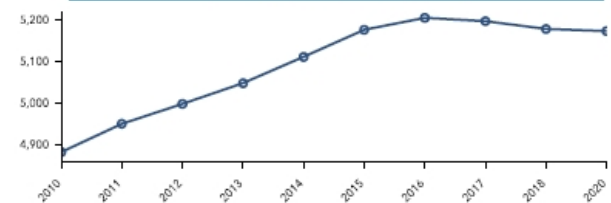
## POPULATION BY AGE



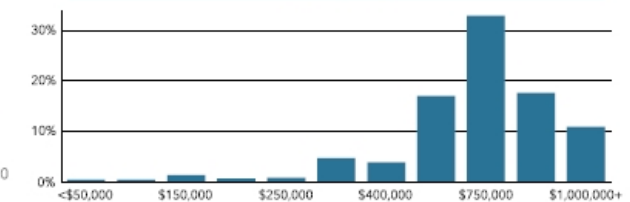
## POPULATION BY GENERATION



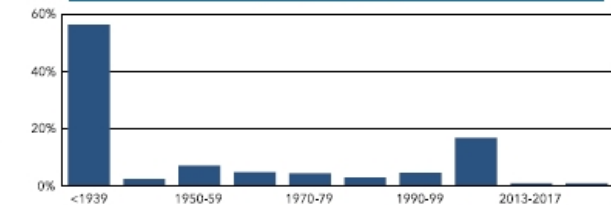
## Historical Trends: Population



## Home Value



## Housing: Year Built



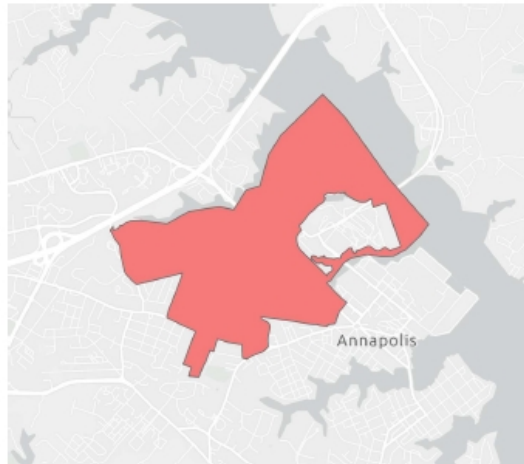
THE SCIENCE OF WHERE™

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## City of Annapolis: Ward 2

Frederick Paone

Analysis by Q. Cummings

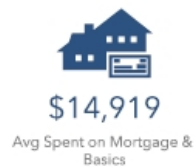


# POPULATION TRENDS AND KEY INDICATORS

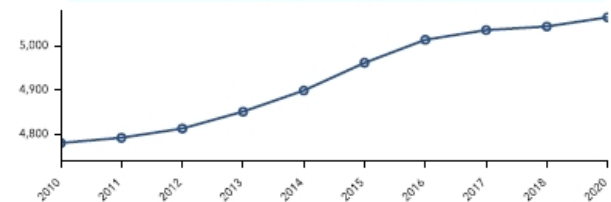
Frederick Paone

5,064	2,220	2.23	44.2	\$94,634	\$471,566	186	109	61
Population	Households	Avg Size Household	Median Age	Median Household Income	Median Home Value	Wealth Index	Housing Affordability	Diversity Index

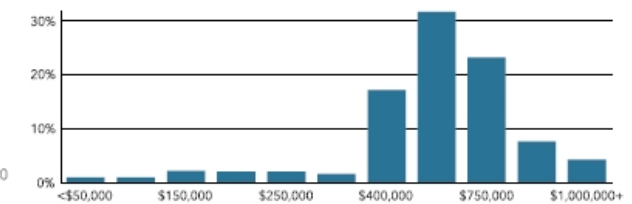
## MORTGAGE INDICATORS



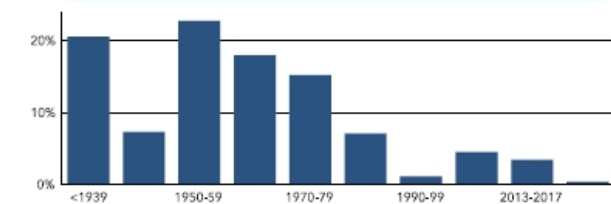
## Historical Trends: Population



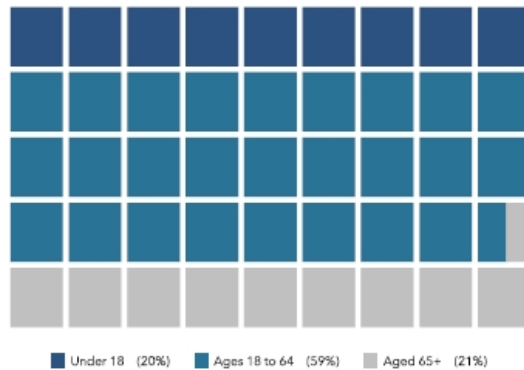
## Home Value



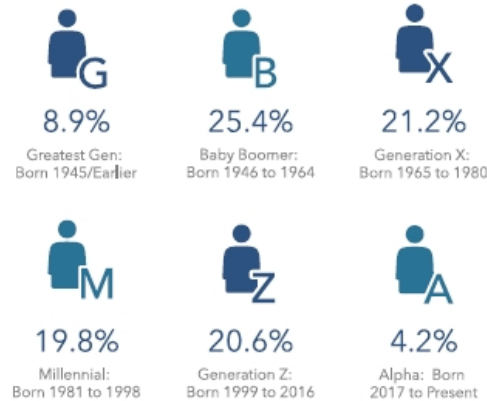
## Housing: Year Built



## POPULATION BY AGE



## POPULATION BY GENERATION

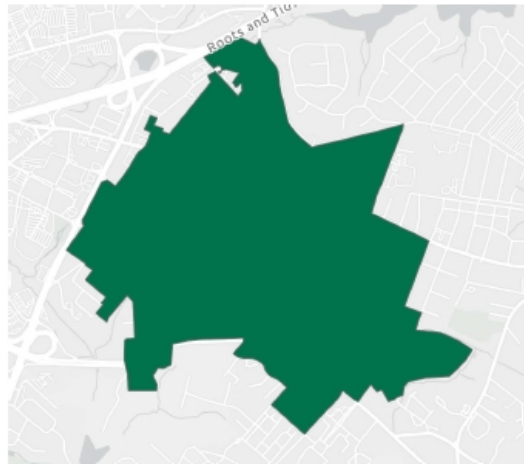


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## City of Annapolis: Ward 3

Rhonda Pindell-Charles

Analysis by Q. Cummings



# POPULATION TRENDS AND KEY INDICATORS

Rhonda Pindell-Charles

5,061	1,752	2.89	35.7	\$74,101	\$413,986	116	96	83
Population	Households	Avg Size Household	Median Age	Median Household Income	Median Home Value	Wealth Index	Housing Affordability	Diversity Index

## MORTGAGE INDICATORS



\$11,171

Avg Spent on Mortgage & Basics



23.3%

Percent of Income for Mortgage

## POPULATION BY AGE



Under 18 (24%) Ages 18 to 64 (63%) Aged 65+ (14%)

## POPULATION BY GENERATION



5.5%

Greatest Gen:  
Born 1945/Earlier



18.2%

Baby Boomer:  
Born 1946 to 1964



18.8%

Generation X:  
Born 1965 to 1980



29.0%

Millennial:  
Born 1981 to 1998



22.8%

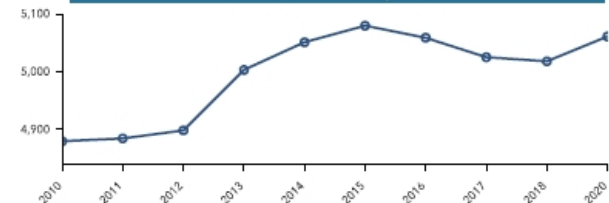
Generation Z:  
Born 1999 to 2016



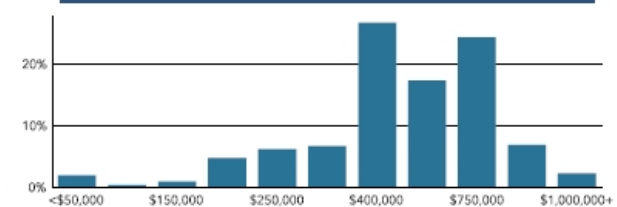
5.7%

Alpha: Born  
2017 to Present

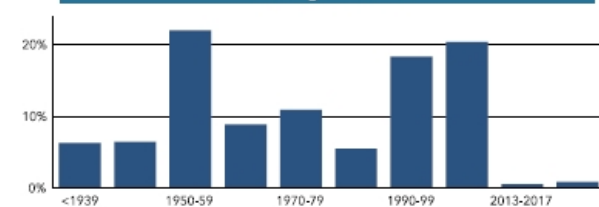
## Historical Trends: Population



## Home Value



## Housing: Year Built



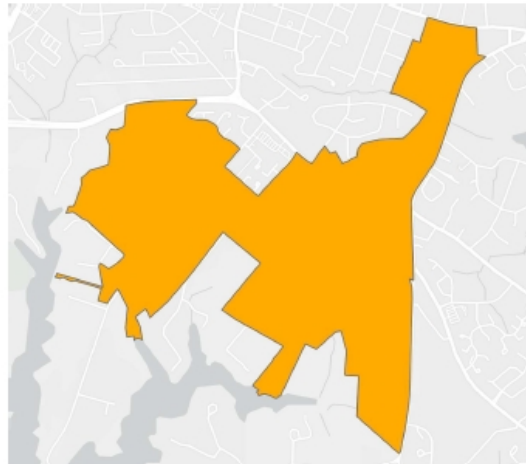
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## City of Annapolis: Ward 4

Sheila Finlayson

Analysis by Q. Cummings



# POPULATION TRENDS AND KEY INDICATORS

Sheila Finlayson

5,321	1,915	2.77	30.4	\$69,495	\$374,615	80	100	78
Population	Households	Avg Size Household	Median Age	Median Household Income	Median Home Value	Wealth Index	Housing Affordability	Diversity Index

## MORTGAGE INDICATORS



\$10,026

Avg Spent on Mortgage & Basics



22.5%

Percent of Income for Mortgage

## POPULATION BY AGE



■ Under 18 (26%) ■ Ages 18 to 64 (64%) ■ Aged 65+ (10%)

## POPULATION BY GENERATION



3.3%

Greatest Gen:  
Born 1945/Earlier



15.3%

Baby Boomer:  
Born 1946 to 1964



17.3%

Generation X:  
Born 1965 to 1980



31.4%

Millennial:  
Born 1981 to 1998



26.2%

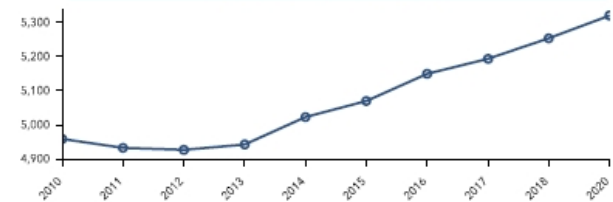
Generation Z:  
Born 1999 to 2016



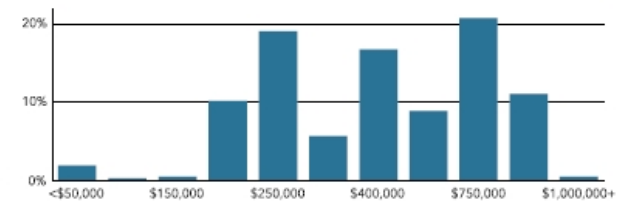
6.5%

Alpha: Born  
2017 to Present

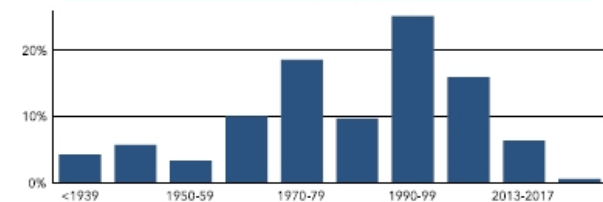
## Historical Trends: Population



## Home Value



## Housing: Year Built

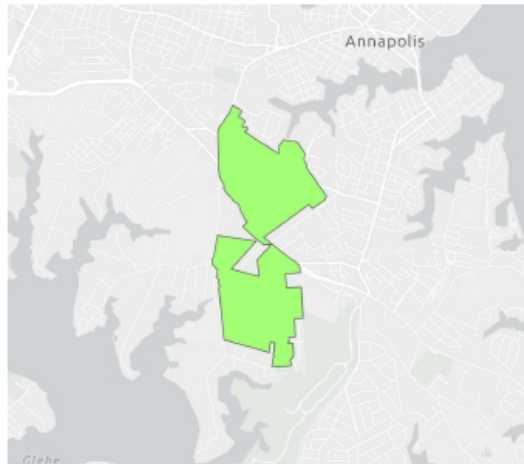


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## City of Annapolis: Ward 5

Brooks Schandelmeier

Analysis by Q. Cummings



# POPULATION TRENDS AND KEY INDICATORS

Brooks Schandelmeier

5,264	1,914	2.72	36.9	\$82,472	\$337,826	116	133	79
Population	Households	Avg Size Household	Median Age	Median Household Income	Median Home Value	Wealth Index	Housing Affordability	Diversity Index

## MORTGAGE INDICATORS



\$12,934

Avg Spent on Mortgage & Basics



17.1%

Percent of Income for Mortgage

## POPULATION BY AGE



■ Under 18 (24%) ■ Ages 18 to 64 (63%) ■ Aged 65+ (14%)

## POPULATION BY GENERATION



5.5%

Greatest Gen:  
Born 1945/Earlier



17.5%

Baby Boomer:  
Born 1946 to 1964



21.4%

Generation X:  
Born 1965 to 1980



27.6%

Millennial:  
Born 1981 to 1998



22.6%

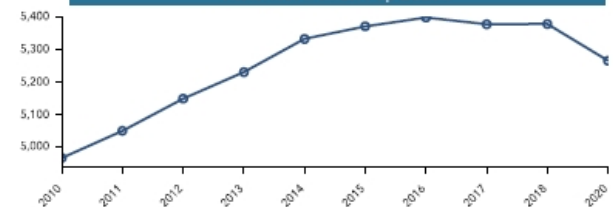
Generation Z:  
Born 1999 to 2016



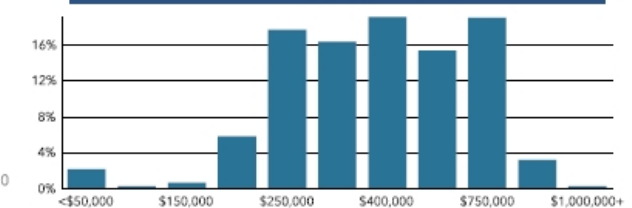
5.5%

Alpha: Born  
2017 to Present

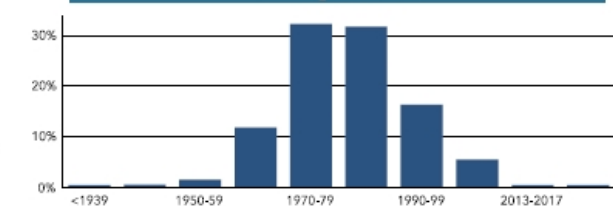
## Historical Trends: Population



## Home Value



## Housing: Year Built

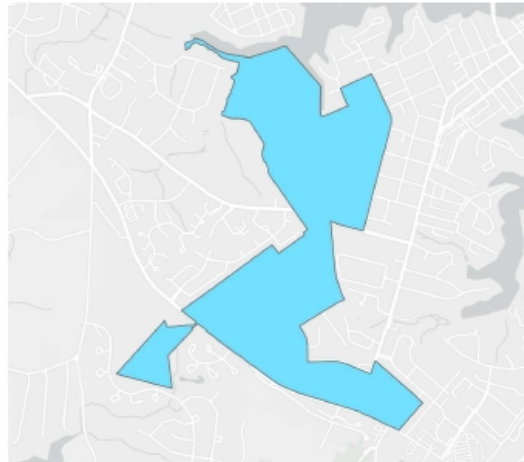


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## City of Annapolis: Ward 6

DaJuan Gay

Analysis by Q. Cummings



# POPULATION TRENDS AND KEY INDICATORS

DaJuan Gay

<b>4,524</b>	<b>1,634</b>	<b>2.72</b>	<b>35.9</b>	<b>\$71,811</b>	<b>\$316,327</b>	<b>83</b>	<b>123</b>	<b>83</b>
Population	Households	Avg Size Household	Median Age	Median Household Income	Median Home Value	Wealth Index	Housing Affordability	Diversity Index

## MORTGAGE INDICATORS



**\$9,858**

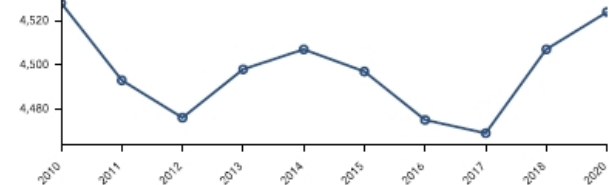
Avg Spent on Mortgage & Basics



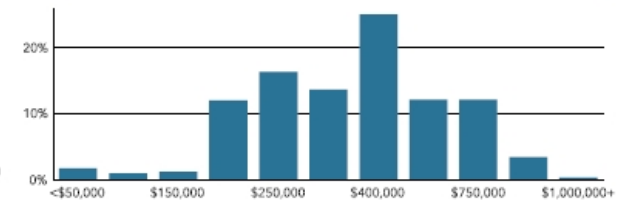
**18.4%**

Percent of Income for Mortgage

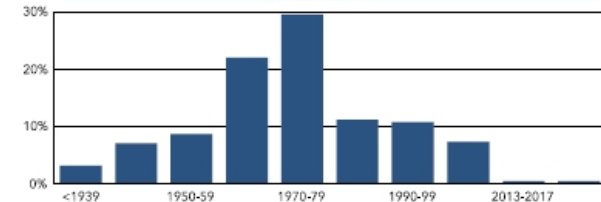
## Historical Trends: Population



## Home Value



## Housing: Year Built



## POPULATION BY AGE



Under 18 (26%) Ages 18 to 64 (60%) Aged 65+ (14%)

## POPULATION BY GENERATION



**6.0%**

Greatest Gen:  
Born 1945/Earlier



**17.2%**

Baby Boomer:  
Born 1946 to 1964



**19.4%**

Generation X:  
Born 1965 to 1980



**27.9%**

Millennial:  
Born 1981 to 1998



**23.2%**

Generation Z:  
Born 1999 to 2016



**6.3%**

Alpha: Born  
2017 to Present



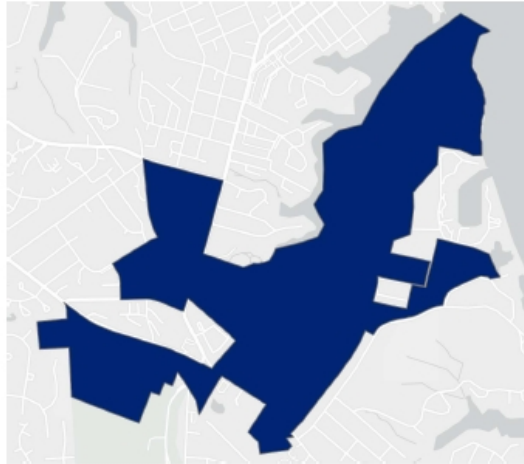
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## City of Annapolis: Ward 7

Rob Savidge

Analysis by Q. Cummings



# POPULATION TRENDS AND KEY INDICATORS

Rob Savidge

4,884	2,416	2.01	38.6	\$73,431	\$309,928	105	128	75
Population	Households	Avg Size Household	Median Age	Median Household Income	Median Home Value	Wealth Index	Housing Affordability	Diversity Index

## MORTGAGE INDICATORS



\$10,639

Avg Spent on Mortgage & Basics



17.6%

Percent of Income for Mortgage

## POPULATION BY AGE



■ Under 18 (20%) ■ Ages 18 to 64 (58%) ■ Aged 65+ (22%)

## POPULATION BY GENERATION



13.5%

Greatest Gen:  
Born 1945/Earlier



17.1%

Baby Boomer:  
Born 1946 to 1964



17.5%

Generation X:  
Born 1965 to 1980



28.6%

Millennial:  
Born 1981 to 1998



18.0%

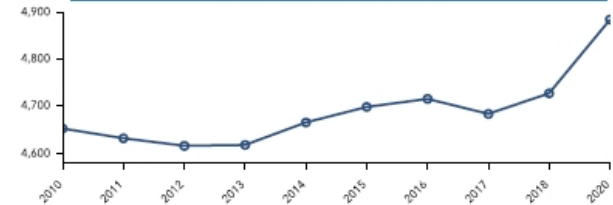
Generation Z:  
Born 1999 to 2016



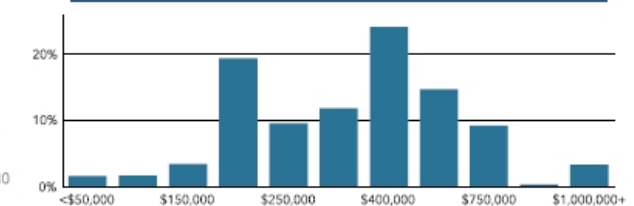
5.3%

Alpha: Born  
2017 to Present

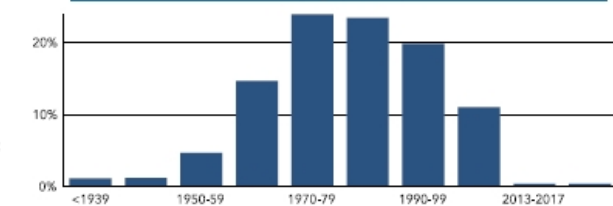
## Historical Trends: Population



## Home Value



## Housing: Year Built

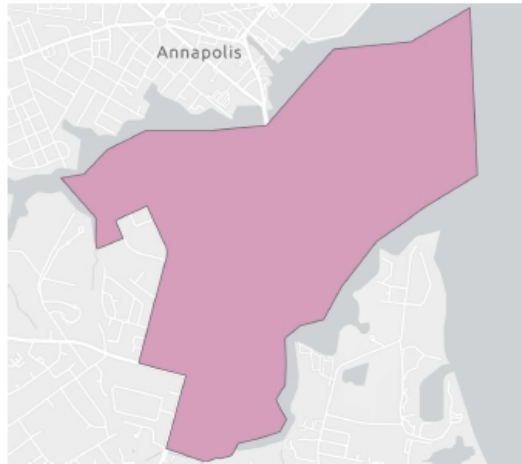


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## City of Annapolis: Ward 8

Ross Arnett, III

Analysis by Q. Cummings



# POPULATION TRENDS AND KEY INDICATORS

Ross Arnett, III

4,844	2,484	1.94	49.4	\$97,059	\$671,147	191	79	54
Population	Households	Avg Size Household	Median Age	Median Household Income	Median Home Value	Wealth Index	Housing Affordability	Diversity Index

## MORTGAGE INDICATORS



\$17,997

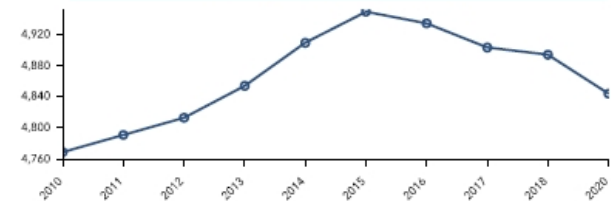
Avg Spent on Mortgage & Basics



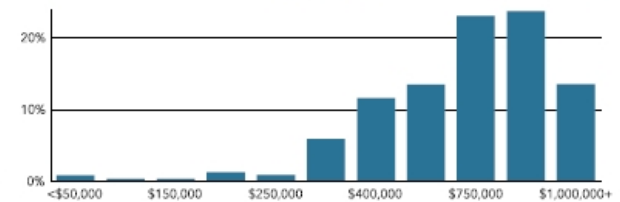
28.9%

Percent of Income for Mortgage

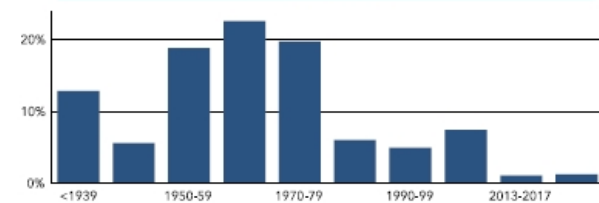
## Historical Trends: Population



## Home Value



## Housing: Year Built



## POPULATION BY AGE



Under 18 (15%) Ages 18 to 64 (55%) Aged 65+ (29%)

## POPULATION BY GENERATION



13.3%

Greatest Gen:  
Born 1945/Earlier



28.7%

Baby Boomer:  
Born 1946 to 1964



20.5%

Generation X:  
Born 1965 to 1980



20.0%

Millennial:  
Born 1981 to 1998



14.4%

Generation Z:  
Born 1999 to 2016



3.1%

Alpha: Born  
2017 to Present



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